

ML Runtimes Pre-installed Packages

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Pre-Installed Packages in ML Runtimes

Cloudera Machine Learning ships with several base engine images that include Python kernels, and frequently used libraries.



Note: New ML Runtime releases are automatically added to the deployment, if internet connection is available.

Because the software and versions in these lists is installed in the images, you should not upgrade these versions because this will cause dependency conflicts. If any software in this list needs to be at a higher version, you should use a more recent version of the legacy engine or ML Runtime.

ML Runtimes 2024.05.1

This section lists the Python, R, and Scala libraries that ship with ML Runtimes 2024.05.1.



Note:

Nvidia GPU Editions with a Workbench Editor come with CUDA 11.4.1 and cuDNN 8.2 versions preinstalled.

Nvidia GPU Editions with JupyterLab or a PBJ Workbench Editor and with Python 3.7 come with CUDA 11.8.0 and cuDNN 8.7 versions preinstalled.

All the other Nvidia GPU Edition Runtimes come with CUDA 12.3 and cuDNN 9.0 versions preinstalled.

Python 3.10 Libraries for Conda

This section lists the packages in Python 3.10 Conda Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 1: Packages in Python 3.10.13 Conda Runtimes - Standard

Library	Version
aiohttp	3.9.5
aiosignal	1.3.1
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
async-lru	2.0.4
async-timeout	4.0.3
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3

Library	Version
bleach	6.0.0
boto3	1.34.94
botocore	1.34.94
cattr	22.2.0
certifi	2023.7.22
cfi	1.15.1
charset-normalizer	3.1.0
click	8.1.7
cloudpickle	3.0.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
dask	2024.5.0
dataclasses-json	0.6.6
debugpy	1.6.7
decorator	4.4.2
deepmerge	1.1.1
defusedxml	0.7.1
distributed	2024.5.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
faiss-cpu	1.8.0
fastjsonschema	2.16.3
fonttools	4.43.0
fqdn	1.5.1
frozenset	1.4.1
fsspec	2024.3.1
gitdb	4.0.10
GitPython	3.1.41
greenlet	3.0.3
h11	0.14.0
httpcore	1.0.4
httpx	0.27.0
idna	3.4
importlib_metadata	7.1.0
impyla	0.18.0

Library	Version
ipykernel	6.22.0
ipython	8.10.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.3
jmespath	1.0.1
json5	0.9.11
jsonpatch	1.33
jsonpath-ng	1.6.1
jsonpointer	2.3
jsonschemata	4.21.1
jsonschemata-specifications	2023.12.1
jupyter-events	0.10.0
jupyter-lsp	2.2.2
jupyter-server-mathjax	0.2.6
jupyter-ydoc	2.0.1
jupyter_client	7.4.4
jupyter_collaboration	2.0.5
jupyter_core	5.3.0
jupyter_server	2.7.0
jupyter_server_fileid	0.9.0
jupyter_server_terminals	0.5.3
jupyterlab	4.1.5
jupyterlab-lsp	5.1.0
jupyterlab-pygments	0.2.2
jupyterlab_git	0.50.0
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
langchain	0.1.20
langchain-community	0.0.38
langchain-core	0.1.52
langchain-text-splitters	0.0.1
langsmith	0.1.56
loket	1.0.0
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
marshmallow	3.21.2

Library	Version
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
msgpack	1.0.8
multidict	6.0.5
mypy-extensions	1.0.0
nbclient	0.6.3
nbconvert	7.2.9
nbdime	4.0.1
nbformat	5.7.3
nest-asyncio	1.5.5
notebook_shim	0.2.2
numpy	1.26.4
orjson	3.10.3
overrides	7.7.0
packaging	23.2
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
partd	1.4.2
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	3.5.0
ply	3.11
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.21
pycrdt	0.8.16
pycrdt-websocket	0.12.7
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9

Library	Version
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6
pyzmq	25.1.2
referencing	0.34.0
regex	2024.5.10
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.18.0
s3transfer	0.10.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
sortedcontainers	2.4.0
soupsieve	2.4
SQLAlchemy	2.0.24
stack-data	0.6.2
tblib	3.0.0
tenacity	8.3.0
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tiktoken	0.6.0
tinycss2	1.2.1
tomli	2.0.1
toolz	0.12.1
tornado	6.3.3
traitlets	5.9.0
typeguard	2.13.3
typing-inspect	0.9.0
typing_extensions	4.5.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13

Library	Version
webencodings	0.5.1
websocket-client	1.5.1
yaml	1.9.4
zict	3.0.0
zipp	3.18.1

Python 3.10 Libraries for Workbench

This section lists the packages in Python 3.10 Workbench Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 2: Packages in Python 3.10.13 Workbench Runtimes - Standard

Library	Version
asttokens	2.2.1
backcall	0.2.0
bitarray	2.7.3
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.43.0
idna	3.2
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter_client	7.4.4
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.25.2
packaging	23.2

Library	Version
pandas	2.1.4
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	25.1.2
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.3
traitlets	5.9.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5

Table 3: Packages in Python 3.10.13 PBJ Workbench Runtimes - Standard

Library	Version
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	22.2.0
backcall	0.2.0
beautifulsoup4	4.12.0
bitarray	2.7.3

Library	Version
bleach	6.0.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.6
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.43.0
fqdn	1.5.1
idna	3.4
impyla	0.18.0
ipykernel	6.9.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
Jinja2	3.1.3
jsonpointer	2.3
jsonschema	4.17.3
jupyter-events	0.6.3
jupyter-kernel-gateway	2.5.2
jupyter_client	7.4.9
jupyter_core	5.3.0
jupyter_server	2.5.0
jupyter_server_terminals	0.4.4
jupyterlab-pygments	0.2.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.6
mistune	2.0.5
nbclassic	0.5.5
nbclient	0.7.3

Library	Version
nbconvert	7.3.0
nbformat	5.8.0
nest-asyncio	1.5.6
notebook	6.5.3
notebook_shim	0.2.2
numpy	1.25.2
packaging	23.1
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	3.2.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.21
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0
pyzmq	25.0.2
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0

Library	Version
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.3.3
traitlets	5.9.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.6
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1

Table 4: Packages in Python 3.10.13 PBJ Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-12-3	12.3.2-1
cuda-libraries-dev-12-3	12.3.2-1
libcudnn9-cuda-12	9.0.0.312-1
libcudnn9-dev-cuda-12	9.0.0.312-1
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	22.2.0
backcall	0.2.0
beautifulsoup4	4.12.0
bitarray	2.7.3
bleach	6.0.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.6
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
executing	1.2.0
fastjsonschema	2.16.3

Library	Version
fonttools	4.43.0
fqdn	1.5.1
idna	3.4
impyla	0.18.0
ipykernel	6.9.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
Jinja2	3.1.3
jsonpointer	2.3
jsonschema	4.17.3
jupyter-events	0.6.3
jupyter-kernel-gateway	2.5.2
jupyter_client	7.4.9
jupyter_core	5.3.0
jupyter_server	2.5.0
jupyter_server_terminals	0.4.4
jupyterlab-pygments	0.2.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.6
mistune	2.0.5
nbclassic	0.5.5
nbclient	0.7.3
nbconvert	7.3.0
nbformat	5.8.0
nest-asyncio	1.5.6
notebook	6.5.3
notebook_shim	0.2.2
numpy	1.25.2
packaging	23.1
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5

Library	Version
pillow	10.3.0
platformdirs	3.2.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.21
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0
pyzmq	25.0.2
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.3.3
traitlets	5.9.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.6
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1

Python 3.9 Libraries for Workbench

This section lists the packages in Python 3.9 Workbench Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 5: Packages in Python 3.9.18 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.43.0
idna	3.2
importlib-resources	5.12.0
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.19.1
jupyter_client	7.4.4
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.25.2
packaging	23.2
pandas	2.1.4
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5

Library	Version
pillow	10.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	25.1.2
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.3
traitlets	5.9.0
typing_extensions	4.11.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Table 6: Packages in Python 3.9.18 Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-4	11.4.1-1
libcudnn8	8.2.2.26-1 + cuda11.4
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0

Library	Version
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.43.0
idna	3.2
importlib-resources	5.12.0
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.19.1
jupyter_client	7.4.4
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.25.2
packaging	23.2
pandas	2.1.4
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	25.1.2
requests	2.31.0

Library	Version
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.3
traitlets	5.9.0
typing_extensions	4.11.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Table 7: Packages in Python 3.9.18 PBJ Workbench Runtimes - Standard

Library	Version
anyio	3.7.0
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
asttokens	2.2.1
attrs	21.4.0
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.6.0
bleach	4.1.0
certifi	2023.7.22
cffi	1.15.0
charset-normalizer	2.0.11
contourpy	1.0.7
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.17.1
fonttools	4.43.0
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.12.0

Library	Version
impyla	0.18.0
ipykernel	6.9.0
ipython	8.10.0
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.1.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-kernel-gateway	2.5.2
jupyter-server	1.24.0
jupyter_core	4.12.0
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.0.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.10
nbconvert	7.4.0
nbformat	5.9.0
nest-asyncio	1.5.4
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.25.2
packaging	23.1
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
prometheus-client	0.13.1
prompt-toolkit	3.0.38
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5

Library	Version
pycparser	2.21
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.18.1
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	22.3.0
requests	2.31.0
Send2Trash	1.8.0
six	1.16.0
sniffio	1.3.0
soupsieve	2.4.1
stack-data	0.6.2
terminado	0.13.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.3.3
traitlets	5.1.1
typing_extensions	4.3.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.5.2
zipp	3.15.0

Table 8: Packages in Python 3.9.18 PBJ Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-12-3	12.3.2-1
cuda-libraries-dev-12-3	12.3.2-1
libcudnn9-cuda-12	9.0.0.312-1
libcudnn9-dev-cuda-12	9.0.0.312-1
anyio	3.7.0
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
asttokens	2.2.1
attrs	21.4.0
backcall	0.2.0

Library	Version
beautifulsoup4	4.12.2
bitarray	2.6.0
bleach	4.1.0
certifi	2023.7.22
cffi	1.15.0
charset-normalizer	2.0.11
contourpy	1.0.7
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.17.1
fonttools	4.43.0
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.9.0
ipython	8.10.0
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.1.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-kernel-gateway	2.5.2
jupyter-server	1.24.0
jupyter_core	4.12.0
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.0.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.10

Library	Version
nbconvert	7.4.0
nbformat	5.9.0
nest-asyncio	1.5.4
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.25.2
packaging	23.1
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
prometheus-client	0.13.1
prompt-toolkit	3.0.38
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.21
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.18.1
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	22.3.0
requests	2.31.0
Send2Trash	1.8.0
six	1.16.0
sniffio	1.3.0
soupsieve	2.4.1
stack-data	0.6.2
terminado	0.13.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.3.3
traitlets	5.1.1
typing_extensions	4.3.0

Library	Version
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.5.2
zipp	3.15.0

Python 3.8 Libraries for Workbench

This section lists the packages in Python 3.8 Workbench Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 9: Packages in Python 3.8.18 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.43.0
idna	3.2
importlib-resources	5.12.0
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.23.0
ipython	8.10.0
jedi	0.19.1
jupyter_client	7.4.4
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0

Library	Version
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.24.4
packaging	23.2
pandas	2.0.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	25.1.2
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.3
traitlets	5.9.0
typing_extensions	4.11.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Table 10: Packages in Python 3.8.18 Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-4	11.4.1-1
libcudnn	8.8.2.26-1 + cuda11.4
argcomplete	2.0.0

Library	Version
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.43.0
idna	3.2
importlib-resources	5.12.0
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.23.0
ipython	8.10.0
jedi	0.19.1
jupyter_client	7.4.4
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.24.4
packaging	23.2
pandas	2.0.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2

Library	Version
pure-sasl	0.6.2
py4j	0.10.9.5
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	25.1.2
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.3
traitlets	5.9.0
typing_extensions	4.11.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Table 11: Packages in Python 3.8.18 PBJ Workbench Runtimes - Standard

Library	Version
anyio	3.7.0
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
asttokens	2.2.1
attrs	21.4.0
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.6.0
bleach	4.1.0
certifi	2023.7.22
cffi	1.15.0
charset-normalizer	2.0.11
contourpy	1.0.7
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1

Library	Version
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.17.1
fonttools	4.43.0
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.9.0
ipython	8.10.0
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.1.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-kernel-gateway	2.5.2
jupyter-server	1.24.0
jupyter_core	4.12.0
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.0.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.10
nbconvert	7.4.0
nbformat	5.9.0
nest-asyncio	1.5.4
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.24.4
packaging	23.1
pandas	2.0.3
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0

Library	Version
pickleshare	0.7.5
pillow	10.3.0
prometheus-client	0.13.1
prompt-toolkit	3.0.38
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.21
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.18.1
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	22.3.0
requests	2.31.0
Send2Trash	1.8.0
six	1.16.0
sniffio	1.3.0
soupsieve	2.4.1
stack-data	0.6.2
terminado	0.13.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.3.3
traitlets	5.1.1
typing_extensions	4.3.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.5.2
zipp	3.15.0

Table 12: Packages in Python 3.8.18 PBJ Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-12-3	12.3.2-1
cuda-libraries-dev-12-3	12.3.2-1

Library	Version
libcudnn9-cuda-12	9.0.0.312-1
libcudnn9-dev-cuda-12	9.0.0.312-1
anyio	3.7.0
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
asttokens	2.2.1
attrs	21.4.0
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.6.0
bleach	4.1.0
certifi	2023.7.22
cffi	1.15.0
charset-normalizer	2.0.11
contourpy	1.0.7
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.17.1
fonttools	4.43.0
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.9.0
ipython	8.10.0
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.1.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-kernel-gateway	2.5.2
jupyter-server	1.24.0
jupyter_core	4.12.0
jupyterlab-pygments	0.1.2

Library	Version
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.0.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.10
nbconvert	7.4.0
nbformat	5.9.0
nest-asyncio	1.5.4
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.24.4
packaging	23.1
pandas	2.0.3
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
prometheus-client	0.13.1
prompt-toolkit	3.0.38
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.21
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.18.1
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	22.3.0
requests	2.31.0
Send2Trash	1.8.0
six	1.16.0
sniffio	1.3.0
soupsieve	2.4.1

Library	Version
stack-data	0.6.2
terminado	0.13.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.3.3
traitlets	5.1.1
typing_extensions	4.3.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.5.2
zipp	3.15.0

Python 3.7 Libraries for Workbench

This section lists the packages in Python 3.7 Workbench Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 13: Packages in Python 3.7.16 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1

Library	Version
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.8.0

Table 14: Packages in Python 3.7.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-4	11.4.1-1
libcudnn8	8.2.2.26-1 + cuda11.4
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0

Library	Version
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.8.0

Table 15: Packages in Python 3.7.16 PBJ Workbench Runtimes - Standard

Library	Version
anyio	3.7.0
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
attrs	21.4.0
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.6.0
bleach	4.1.0
certifi	2023.7.22
cffi	1.15.0
charset-normalizer	2.0.11
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
exceptiongroup	1.1.1
fastjsonschema	2.17.1
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.4.0
impyla	0.18.0
ipykernel	6.9.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.1.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-kernel-gateway	2.5.2
jupyter-server	1.24.0
jupyter_core	4.12.0
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.0.1
matplotlib	3.3.4
matplotlib-inline	0.1.3

Library	Version
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.10
nbconvert	7.4.0
nbformat	5.8.0
nest-asyncio	1.5.4
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.21.6
packaging	21.3
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prometheus-client	0.13.1
prompt-toolkit	3.0.27
ptyprocess	0.7.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.18.1
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
Send2Trash	1.8.0
six	1.16.0
sniffio	1.3.0
soupsieve	2.4.1
terminado	0.13.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.18

Library	Version
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.5.2
zipp	3.7.0

Table 16: Packages in Python 3.7.16 PBJ Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
anyio	3.7.0
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
attrs	21.4.0
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.6.0
bleach	4.1.0
certifi	2023.7.22
cffi	1.15.0
charset-normalizer	2.0.11
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
exceptiongroup	1.1.1
fastjsonschema	2.17.1
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.4.0
impyla	0.18.0
ipykernel	6.9.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.1.3
jsonschema	4.4.0

Library	Version
jupyter-client	7.1.2
jupyter-kernel-gateway	2.5.2
jupyter-server	1.24.0
jupyter_core	4.12.0
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.0.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.10
nbconvert	7.4.0
nbformat	5.8.0
nest-asyncio	1.5.4
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.21.6
packaging	21.3
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prometheus-client	0.13.1
prompt-toolkit	3.0.27
ptyprocess	0.7.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.18.1
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
Send2Trash	1.8.0
six	1.16.0

Library	Version
sniffio	1.3.0
soupsieve	2.4.1
terminado	0.13.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.5.2
zipp	3.7.0

Scala 2.11 Libraries for Workbench

This section lists the packages in Scala 2.11.12 Workbench Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Scala 2.11.12 Libraries for Workbench - Standard

Library	Version
org.scala-lang:scala-library	2.11.12
org.scalatest:scalatest	2.2.4
org.scala-lang:scala-reflect	2.11.12
org.scala-lang:scala-compiler	2.11.12
io.circe:circe-generic	0.11.2
io.circe:circe-parser	0.11.2
org.scalameta:scalameta	1.0.0

Python 3.11 Libraries for JupyterLab

This section lists the packages in Python 3.11 JupyterLab Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 17: Packages in Python 3.11.6 JupyterLab Runtimes - Standard

Library	Version
aiohttp	3.9.5
aiosignal	1.3.1
aiosqlite	0.19.0
annotated-types	0.6.0
anyio	4.1.0

Library	Version
argon2-cffi	23.1.0
argon2-cffi-bindings	21.2.0
arrow	1.3.0
asttokens	2.4.1
async-lru	2.0.4
attrs	23.1.0
Babel	2.13.1
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.8.3
bleach	6.1.0
boto3	1.34.94
botocore	1.34.94
cattr	23.2.2
certifi	2023.11.17
cffi	1.16.0
charset-normalizer	3.3.2
click	8.1.7
cloudpickle	3.0.0
colorama	0.4.6
comm	0.2.0
contourpy	1.2.0
cycler	0.12.1
dask	2024.5.0
dataclasses-json	0.6.6
debugpy	1.8.0
decorator	5.1.1
deepmerge	1.1.1
defusedxml	0.7.1
distributed	2024.5.0
docstring-to-markdown	0.13
executing	2.0.1
faiss-cpu	1.8.0
fastjsonschema	2.19.0
fonttools	4.44.3
fqdn	1.5.1
frozenset	1.4.1
fsspec	2024.3.1
gitdb	4.0.11

Library	Version
GitPython	3.1.41
greenlet	3.0.3
h11	0.14.0
httpcore	1.0.4
httpx	0.27.0
idna	3.6
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
isoduration	20.11.0
jedi	0.19.1
jedi-language-server	0.41.2
Jinja2	3.1.3
jmespath	1.0.1
json5	0.9.14
jsonpatch	1.33
jsonpath-ng	1.6.1
jsonpointer	2.4
jsonschema	4.20.0
jsonschema-specifications	2023.11.1
jupyter-events	0.10.0
jupyter-lsp	2.2.2
jupyter-server-mathjax	0.2.6
jupyter-ydoc	2.0.1
jupyter_client	8.6.0
jupyter_collaboration	2.0.5
jupyter_core	5.5.0
jupyter_server	2.11.1
jupyter_server_fileid	0.9.0
jupyter_server_terminals	0.4.4
jupyterlab	4.1.5
jupyterlab-lsp	5.1.0
jupyterlab_git	0.50.0
jupyterlab_pygments	0.3.0
jupyterlab_server	2.25.2
kerberos	1.3.1
kiwisolver	1.4.5
langchain	0.1.19

Library	Version
langchain-community	0.0.38
langchain-core	0.1.52
langchain-text-splitters	0.0.1
langsmith	0.1.56
loket	1.0.0
lsprotocol	2023.0.0
MarkupSafe	2.1.3
marshmallow	3.21.2
matplotlib	3.7.0
matplotlib-inline	0.1.6
mistune	3.0.2
msgpack	1.0.8
multidict	6.0.5
mypy-extensions	1.0.0
nbclient	0.9.0
nbconvert	7.11.0
nbdime	4.0.1
nbformat	5.9.2
nest-asyncio	1.5.8
notebook_shim	0.2.3
numpy	1.26.4
orjson	3.10.3
overrides	7.4.0
packaging	23.2
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
partd	1.4.2
pexpect	4.9.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	4.0.0
ply	3.11
prometheus-client	0.19.0
prompt-toolkit	3.0.41
psutil	5.9.6
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2

Library	Version
py4j	0.10.9.5
pycparser	2.21
pycrdt	0.8.16
pycrdt-websocket	0.12.7
pydantic	2.7.1
pydantic_core	2.18.2
pygls	1.2.1
Pygments	2.17.2
pyparsing	3.1.1
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0.1
pyzmq	25.1.1
referencing	0.31.0
regex	2024.5.10
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.13.1
s3transfer	0.10.1
Send2Trash	1.8.2
six	1.16.0
smmap	5.0.1
sniffio	1.3.0
sortedcontainers	2.4.0
soupsieve	2.5
SQLAlchemy	2.0.30
stack-data	0.6.3
tblib	3.0.0
tenacity	8.3.0
terminado	0.18.0
thrift	0.16.0
thrift-sasl	0.4.3
tiktoken	0.6.0
tinycss2	1.2.1
toolz	0.12.1
tornado	6.3.3
traitlets	5.14.0

Library	Version
types-python-dateutil	2.8.19.14
typing-inspect	0.9.0
typing_extensions	4.11.0
tzdata	2023.3
uri-template	1.3.0
urllib3	2.1.0
wcwidth	0.2.12
webcolors	1.13
webencodings	0.5.1
websocket-client	1.6.4
yaml	1.9.4
zict	3.0.0
zipp	3.18.1

Table 18: Packages in Python 3.11.6 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-12-3	12.3.2-1
cuda-libraries-dev-12-3	12.3.2-1
libcudnn9-cuda-12	9.0.0.312-1
libcudnn9-dev-cuda-12	9.0.0.312-1
aiohttp	3.9.5
aiosignal	1.3.1
aiosqlite	0.19.0
annotated-types	0.6.0
anyio	4.1.0
argon2-cffi	23.1.0
argon2-cffi-bindings	21.2.0
arrow	1.3.0
asttokens	2.4.1
async-lru	2.0.4
attrs	23.1.0
Babel	2.13.1
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.8.3
bleach	6.1.0
boto3	1.34.94
botocore	1.34.94
cattr	23.2.2

Library	Version
certifi	2023.11.17
cff	1.16.0
charset-normalizer	3.3.2
click	8.1.7
cloudpickle	3.0.0
colorama	0.4.6
comm	0.2.0
contourpy	1.2.0
cycler	0.12.1
dask	2024.5.0
dataclasses-json	0.6.6
debugpy	1.8.0
decorator	5.1.1
deepmerge	1.1.1
defusedxml	0.7.1
distributed	2024.5.0
docstring-to-markdown	0.13
executing	2.0.1
faiss-cpu	1.8.0
fastjsonschema	2.19.0
fonttools	4.44.3
fqdn	1.5.1
frozenset	1.4.1
fsspec	2024.3.1
gitdb	4.0.11
GitPython	3.1.41
greenlet	3.0.3
h11	0.14.0
httpcore	1.0.4
httpx	0.27.0
idna	3.6
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
isoduration	20.11.0
jedi	0.19.1
jedi-language-server	0.41.2
Jinja2	3.1.3

Library	Version
jmespath,	1.0.1
json5	0.9.14
jsonpatch	1.33
jsonpath-ng	1.6.1
jsonpointer	2.4
jsonschema	4.20.0
jsonschema-specifications	2023.11.1
jupyter-events	0.10.0
jupyter-lsp	2.2.2
jupyter-server-mathjax	0.2.6
jupyter-ydoc	2.0.1
jupyter_client	8.6.0
jupyter_collaboration	2.0.5
jupyter_core	5.5.0
jupyter_server	2.11.1
jupyter_server_fileid	0.9.0
jupyter_server_terminals	0.4.4
jupyterlab	4.1.5
jupyterlab-lsp	5.1.0
jupyterlab_git	0.50.0
jupyterlab_pygments	0.3.0
jupyterlab_server	2.25.2
kerberos	1.3.1
kiwisolver	1.4.5
langchain	0.1.19
langchain-community	0.0.38
langchain-core	0.1.52
langchain-text-splitters	0.0.1
langsmith	0.1.56
locket	1.0.0
lsprotocol	2023.0.0
MarkupSafe	2.1.3
marshmallow	3.21.2
matplotlib	3.7.0
matplotlib-inline	0.1.6
mistune	3.0.2
msgpack	1.0.8
multidict	6.0.5
mypy-extensions	1.0.0

Library	Version
nbclient	0.9.0
nbconvert	7.11.0
nbdime	4.0.1
nbformat	5.9.2
nest-asyncio	1.5.8
notebook_shim	0.2.3
numpy	1.26.4
orjson	3.10.3
overrides	7.4.0
packaging	23.2
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
partd	1.4.2
pexpect	4.9.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	4.0.0
ply	3.11
prometheus-client	0.19.0
prompt-toolkit	3.0.41
psutil	5.9.6
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.21
pycrdt	0.8.16
pycrdt-websocket	0.12.7
pydantic	2.7.1
pydantic_core	2.18.2
pygls	1.2.1
Pygments	2.17.2
pyparsing	3.1.1
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0.1
pyzmq	25.1.1

Library	Version
referencing	0.31.0
regex	2024.5.10
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.13.1
s3transfer	0.10.1
Send2Trash	1.8.2
six	1.16.0
smmap	5.0.1
sniffio	1.3.0
sortedcontainers	2.4.0
soupsieve	2.5
SQLAlchemy	2.0.30
stack-data	0.6.3
tblib	3.0.0
tenacity	8.3.0
terminado	0.18.0
thrift	0.16.0
thrift-sasl	0.4.3
tiktoken	0.6.0
tinycss2	1.2.1
toolz	0.12.1
tornado	6.3.3
traitlets	5.14.0
types-python-dateutil	2.8.19.14
typing-inspect	0.9.0
typing_extensions	4.11.0
tzdata	2023.3
uri-template	1.3.0
urllib3	2.1.0
wcwidth	0.2.12
webcolors	1.13
webencodings	0.5.1
websocket-client	1.6.4
yaml	1.9.4
zict	3.0.0
zipp	3.18.1

Python 3.10 Libraries for JupyterLab

This section lists the packages in Python 3.10 JupyterLab Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 19: Packages in Python 3.10.13 JupyterLab Runtimes - Standard

Library	Version
aiohttp	3.9.5
aiosignal	1.3.1
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
async-lru	2.0.4
async-timeout	4.0.3
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
boto3	1.34.94
botocore	1.34.94
cattr	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
click	8.1.7
cloudpickle	3.0.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
dask	2024.5.0
dataclasses-json	0.6.6
debugpy	1.6.7
decorator	4.4.2
deepmerge	1.1.1
defusedxml	0.7.1

Library	Version
distributed	2024.5.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
faiss-cpu	1.8.0
fastjsonschema	2.16.3
fonttools	4.43.0
fqdn	1.5.1
frozenset	1.4.1
fsspec	2024.3.1
gitdb	4.0.10
GitPython	3.1.41
greenlet	3.0.3
h11	0.14.0
httpcore	1.0.4
httpx	0.27.0
idna	3.4
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.3
jmespath	1.0.1
json5	0.9.11
jsonpatch	1.33
jsonpath-ng	1.6.1
jsonpointer	2.3
jsonschema	4.21.1
jsonschema-specifications	2023.12.1
jupyter-events	0.10.0
jupyter-lsp	2.2.2
jupyter-server-mathjax	0.2.6
jupyter-ydoc	2.0.1
jupyter_client	7.4.4
jupyter_collaboration	2.0.5

Library	Version
jupyter_core	5.3.0
jupyter_server	2.7.0
jupyter_server_fileid	0.9.0
jupyter_server_terminals	0.5.3
jupyterlab	4.1.5
jupyterlab-lsp	5.1.0
jupyterlab-pygments	0.2.2
jupyterlab_git	0.50.0
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
langchain	0.1.20
langchain-community	0.0.38
langchain-core	0.1.52
langchain-text-splitters	0.0.1
langsmith	0.1.56
loket	1.0.0
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
marshmallow	3.21.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
msgpack	1.0.8
multidict	6.0.5
mypy-extensions	1.0.0
nbclient	0.6.3
nbconvert	7.2.9
nbdime	4.0.1
nbformat	5.7.3
nest-asyncio	1.5.5
notebook_shim	0.2.2
numpy	1.26.4
orjson	3.10.3
overrides	7.7.0
packaging	23.2
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3

Library	Version
partd	1.4.2
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	3.5.0
ply	3.11
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.21
pycrdt	0.8.16
pycrdt-websocket	0.12.7
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6
pyzmq	25.1.2
referencing	0.34.0
regex	2024.5.10
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.18.0
s3transfer	0.10.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
sortedcontainers	2.4.0
soupsieve	2.4
SQLAlchemy	2.0.24

Library	Version
stack-data	0.6.2
tblib	3.0.0
tenacity	8.3.0
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tiktoken	0.6.0
tinycss2	1.2.1
tomli	2.0.1
toolz	0.12.1
tornado	6.3.3
traitlets	5.9.0
typeguard	2.13.3
typing-inspect	0.9.0
typing_extensions	4.5.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
yaml	1.9.4
zict	3.0.0
zipp	3.18.1

Table 20: Packages in Python 3.10.13 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-12-3	12.3.2-1
cuda-libraries-dev-12-3	12.3.2-1
libcudnn9-cuda-12	9.0.0.312-1
libcudnn9-dev-cuda-12	9.0.0.312-1
aiohttp	3.9.5
aiosignal	1.3.1
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3

Library	Version
asttokens	2.2.1
async-lru	2.0.4
async-timeout	4.0.3
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
boto3	1.34.94
botocore	1.34.94
cattr	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
click	8.1.7
cloudpickle	3.0.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
dask	2024.5.0
dataclasses-json	0.6.6
debugpy	1.6.7
decorator	4.4.2
deepmerge	1.1.1
defusedxml	0.7.1
distributed	2024.5.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
faiss-cpu	1.8.0
fastjsonschema	2.16.3
fonttools	4.43.0
fqdn	1.5.1
frozenset	1.4.1
fsspec	2024.3.1
gitdb	4.0.10

Library	Version
GitPython	3.1.41
greenlet	3.0.3
h11	0.14.0
httpcore	1.0.4
httpx	0.27.0
idna	3.4
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.3
jmespath	1.0.1
json5	0.9.11
jsonpatch	1.33
jsonpath-ng	1.6.1
jsonpointer	2.3
jsonschema	4.21.1
jsonschema-specifications	2023.12.1
jupyter-events	0.10.0
jupyter-lsp	2.2.2
jupyter-server-mathjax	0.2.6
jupyter-ydoc	2.0.1
jupyter_client	7.4.4
jupyter_collaboration	2.0.5
jupyter_core	5.3.0
jupyter_server	2.7.0
jupyter_server_field	0.9.0
jupyter_server_terminals	0.5.3
jupyterlab	4.1.5
jupyterlab-lsp	5.1.0
jupyterlab-pygments	0.2.2
jupyterlab_git	0.50.0
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
langchain	0.1.20

Library	Version
langchain-community	0.0.38
langchain-core	0.1.52
langchain-text-splitters	0.0.1
langsmith	0.1.56
loket	1.0.0
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
marshmallow	3.21.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
msgpack	1.0.8
multidict	6.0.5
mypy-extensions	1.0.0
nbclient	0.6.3
nbconvert	7.2.9
nbdime	4.0.1
nbformat	5.7.3
nest-asyncio	1.5.5
notebook_shim	0.2.2
numpy	1.26.4
orjson	3.10.3
overrides	7.7.0
packaging	23.2
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
partd	1.4.2
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	3.5.0
ply	3.11
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2

Library	Version
py4j	0.10.9.5
pycparser	2.21
pycrdt	0.8.16
pycrdt-websocket	0.12.7
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0
pyzmq	25.1.2
referencing	0.34.0
regex	2024.5.10
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.18.0
s3transfer	0.10.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
sortedcontainers	2.4.0
soupsieve	2.4
SQLAlchemy	2.0.24
stack-data	0.6.2
tblib	3.0.0
tenacity	8.3.0
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tiktoken	0.6.0
tinycss2	1.2.1
tomli	2.0.1
toolz	0.12.1
tornado	6.3.3
traitlets	5.9.0

Library	Version
typeguard	2.13.3
typing-inspect	0.9.0
typing_extensions	4.5.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
yaml	1.9.4
zict	3.0.0
zipp	3.18.1

Python 3.9 Libraries for JupyterLab

This section lists the packages in Python 3.9 JupyterLab Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 21: Packages in Python 3.9.18 JupyterLab Runtimes - Standard

Library	Version
aiohttp	3.9.5
aiosignal	1.3.1
aiosqlite	0.20.0
annotated-types	0.6.0
anyio	4.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
async-lru	2.0.4
async-timeout	4.0.3
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
boto3	1.34.94

Library	Version
botocore	1.34.94
cattr	23.2.3
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
click	8.1.7
cloudpickle	3.0.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
dask	2024.5.0
dataclasses-json	0.6.6
debugpy	1.6.7
decorator	4.4.2
deepmerge	1.1.1
defusedxml	0.6.0
distributed	2024.5.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
faiss-cpu	1.8.0
fastjsonschema	2.15.3
fonttools	4.43.0
fqdn	1.5.1
frozenset	1.4.1
fsspec	2024.3.1
gitdb	4.0.10
GitPython	3.1.41
greenlet	3.0.3
h11	0.14.0
httpcore	1.0.4
httpx	0.27.0
idna	2.1
importlib-resources	5.12.0
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.22.0

Library	Version
ipython	8.10.0
isoduration	20.11.0
jedi	0.19.1
jedi-language-server	0.41.4
Jinja2	3.1.3
jmespath	1.0.1
json5	0.9.5
jsonpatch	1.33
jsonpath-ng	1.6.1
jsonpointer	2.3
jsonschema	4.21.1
jsonschema-specifications	2023.12.1
jupyter-events	0.10.0
jupyter-lsp	2.2.2
jupyter-server-mathjax	0.2.6
jupyter-ydoc	2.0.1
jupyter_client	7.4.4
jupyter_collaboration	2.0.5
jupyter_core	5.3.0
jupyter_server	2.7.0
jupyter_server_fileid	0.9.1
jupyter_server_terminals	0.5.3
jupyterlab	4.1.5
jupyterlab-lsp	5.1.0
jupyterlab-pygments	0.1.2
jupyterlab_git	0.50.0
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
langchain	0.1.20
langchain-community	0.0.38
langchain-core	0.1.52
langchain-text-splitters	0.0.1
langsmith	0.1.56
loket	1.0.0
lsprotocol	2023.0.1
MarkupSafe	2.1.1
marshmallow	3.21.2
matplotlib	3.7.0

Library	Version
matplotlib-inline	0.1.3
mistune	2.0.5
msgpack	1.0.8
multidict	6.0.5
mypy-extensions	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	4.0.1
nbformat	5.3.0
nest-asyncio	1.5.5
notebook_shim	0.2.3
numpy	1.26.4
orjson	3.10.3
overrides	7.7.0
packaging	23.2
pandas	2.1.4
pandocfilters	1.4.3
parso	0.8.3
partd	1.4.2
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	3.5.0
ply	3.11
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.2
pycrdt	0.8.16
pycrdt-websocket	0.12.7
pydantic	2
pydantic_core	2.0.1
pygls	1.3.1
Pygments	2.15.1
pyparsing	3.0.9

Library	Version
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6
pyzmq	25.1.2
referencing	0.34.0
regex	2024.5.10
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.18.0
s3transfer	0.10.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
sortedcontainers	2.4.0
soupsieve	2.3.2
SQLAlchemy	2.0.30
stack-data	0.6.2
tblib	3.0.0
tenacity	8.3.0
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tiktoken	0.6.0
tinycss2	1.1.1
tomli	2.0.1
toolz	0.12.1
tornado	6.3.3
traitlets	5.9.0
typing-inspect	0.9.0
typing_extensions	4.11.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1

Library	Version
websocket-client	1.2.1
yaml	1.9.4
zict	3.0.0
zipp	3.15.0

Table 22: Packages in Python 3.9.18 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-12-3	12.3.2-1
cuda-libraries-dev-12-3	12.3.2-1
libcudnn9-cuda-12	9.0.0.312-1
libcudnn9-dev-cuda-12	9.0.0.312-1
aiohttp	3.9.5
aiosignal	1.3.1
aiosqlite	0.20.0
annotated-types	0.6.0
anyio	4.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
async-lru	2.0.4
async-timeout	4.0.3
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
boto3	1.34.94
botocore	1.34.94
cattrs	23.2.3
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
click	8.1.7
cloudpickle	3.0.0
colorama	0.4.6
comm	0.1.3

Library	Version
contourpy	1.0.7
cycler	0.11.0
dask	2024.5.0
dataclasses-json	0.6.6
debugpy	1.6.7
decorator	4.4.2
deepmerge	1.1.1
defusedxml	0.6.0
distributed	2024.5.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
faiss-cpu	1.8.0
fastjsonschema	2.15.3
fonttools	4.43.0
fqdn	1.5.1
frozenset	1.4.1
fsspec	2024.3.1
gitdb	4.0.10
GitPython	3.1.41
greenlet	3.0.3
h11	0.14.0
httpcore	1.0.4
httpx	0.27.0
idna	2.10
importlib-resources	5.12.0
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
isoduration	20.11.0
jedi	0.19.1
jedi-language-server	0.41.4
Jinja2	3.1.3
jmespath	1.0.1
json5	0.9.5
jsonpatch	1.33
jsonpath-ng	1.6.1

Library	Version
jsonpointer	2.3
jsonschem	4.21.1
jsonschem-specifications	2023.12.1
jupyter-events	0.10.0
jupyter-lsp	2.2.2
jupyter-server-mathjax	0.2.6
jupyter-ydoc	2.0.1
jupyter_client	7.4.4
jupyter_collaboration	2.0.5
jupyter_core	5.3.0
jupyter_server	2.7.0
jupyter_server_field	0.9.1
jupyter_server_terminals	0.5.3
jupyterlab	4.1.5
jupyterlab-lsp	5.1.0
jupyterlab-pygments	0.1.2
jupyterlab_git	0.50.0
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
langchain	0.1.20
langchain-community	0.0.38
langchain-core	0.1.52
langchain-text-splitters	0.0.1
langsmith	0.1.56
loket	1.0.0
lsprotocol	2023.0.1
MarkupSafe	2.1.1
marshmallow	3.21.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
msgpack	1.0.8
multidict	6.0.5
mypy-extensions	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	4.0.1
nbformat	5.3.0

Library	Version
nest-asyncio	1.5.5
notebook_shim	0.2.3
numpy	1.26.4
orjson	3.10.3
overrides	7.7.0
packaging	23.2
pandas	2.1.4
pandocfilters	1.4.3
parso	0.8.3
partd	1.4.2
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
platformdirs	3.5.0
ply	3.11
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.20
pycrdt	0.8.16
pycrdt-websocket	0.12.7
pydantic	2.0
pydantic_core	2.0.1
pygls	1.3.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0
pyzmq	25.1.2
referencing	0.34.0
regex	2024.5.10
requests	2.31.0
rfc3339-validator	0.1.4

Library	Version
rfc3986-validator	0.1.1
rpds-py	0.18.0
s3transfer	0.10.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
sortedcontainers	2.4.0
soupsieve	2.3.2
SQLAlchemy	2.0.30
stack-data	0.6.2
tblib	3.0.0
tenacity	8.3.0
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tiktoken	0.6.0
tinycss2	1.1.1
tomli	2.0.1
toolz	0.12.1
tornado	6.3.3
traitlets	5.9.0
typing-inspect	0.9.0
typing_extensions	4.11.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
yaml	1.9.4
zict	3.0.0
zipp	3.15.0

Python 3.8 Libraries for JupyterLab

This section lists the packages in Python 3.8 JupyterLab Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 23: Packages in Python 3.8.18 JupyterLab Runtimes - Standard

Library	Version
aiohttp	3.9.5
aiosignal	1.3.1
aiosqlite	0.20.0
annotated-types	0.6.0
anyio	4.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.1
async-lru	2.0.4
async-timeout	4.0.3
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
boto3	1.34.94
botocore	1.34.94
cattr	23.2.3
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
click	8.1.7
cloudpickle	3.0.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
dask	2023.5.0
dataclasses-json	0.6.6
debugpy	1.6.7
decorator	4.4.2
deepmerge	1.1.1
defusedxml	0.6.0
distributed	2023.5.0

Library	Version
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
faiss-cpu	1.8.0
fastjsonschema	2.15.3
fonttools	4.43.0
fqdn	1.5.1
frozenset	1.4.1
fsspec	2024.3.1
gitdb	4.0.10
GitPython	3.1.41
greenlet	3.0.3
h11	0.14.0
httpcore	1.0.4
httpx	0.27.0
idna	2.1
importlib-resources	5.12.0
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.23.0
ipython	8.10.0
isoduration	20.11.0
jedi	0.19.1
jedi-language-server	0.41.4
Jinja2	3.1.3
jmespath	1.0.1
json5	0.9.5
jsonpatch	1.33
jsonpath-ng	1.6.1
jsonpointer	2.3
jsonschema	4.21.1
jsonschema-specifications	2023.12.1
jupyter-events	0.10.0
jupyter-lsp	2.2.2
jupyter-server-mathjax	0.2.6
jupyter-ydoc	2.0.1
jupyter_client	7.4.4
jupyter_collaboration	2.0.5

Library	Version
jupyter_core	5.3.0
jupyter_server	2.7.0
jupyter_server_fileid	0.9.1
jupyter_server_terminals	0.5.3
jupyterlab	4.1.5
jupyterlab-lsp	5.1.0
jupyterlab-pygments	0.1.2
jupyterlab_git	0.50.0
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
langchain	0.1.20
langchain-community	0.0.38
langchain-core	0.1.52
langchain-text-splitters	0.0.1
langsmith	0.1.56
loket	1.0.0
lsprotocol	2023.0.1
MarkupSafe	2.1.1
marshmallow	3.21.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
msgpack	1.0.8
multidict	6.0.5
mypy-extensions	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	4.0.1
nbformat	5.3.0
nest-asyncio	1.5.5
notebook_shim	0.2.3
numpy	1.24.4
orjson	3.10.3
overrides	7.7.0
packaging	23.2
pandas	2.0.3
pandocfilters	1.4.3
parso	0.8.3

Library	Version
partd	1.4.1
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
ply	3.11
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.2
pycrdt	0.8.16
pycrdt-websocket	0.12.7
pydantic	2
pydantic_core	2.0.1
pygls	1.3.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6
pyzmq	25.1.2
referencing	0.34.0
regex	2024.5.10
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.18.0
s3transfer	0.10.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
sortedcontainers	2.4.0

Library	Version
soupsieve	2.3.2
SQLAlchemy	2.0.30
stack-data	0.6.2
tblib	3.0.0
tenacity	8.3.0
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tiktoken	0.6.0
tinycss2	1.1.1
tomli	2.0.1
toolz	0.12.1
tornado	6.3.3
traitlets	5.9.0
typing-inspect	0.9.0
typing_extensions	4.11.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
yaml	1.9.4
zict	3.0.0
zipp	3.15.0

Table 24: Packages in Python 3.8.18 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-12-3	12.3.2-1
cuda-libraries-dev-12-3	12.3.2-1
libcudnn9-cuda-12	9.0.0.312-1
libcudnn9-dev-cuda-12	9.0.0.312-1
aiohttp	3.9.5
aiosignal	1.3.1
aiosqlite	0.20.0
annotated-types	0.6.0
anyio	4.3.0
argcomplete	2.0.0

Library	Version
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.1
async-lru	2.0.4
async-timeout	4.0.3
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
boto3	1.34.94
botocore	1.34.94
cattr	23.2.3
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
click	8.1.7
cloudpickle	3.0.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
dask	2023.5.0
dataclasses-json	0.6.6
debugpy	1.6.7
decorator	4.4.2
deepmerge	1.1.1
defusedxml	0.6.0
distributed	2023.5.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
faiss-cpu	1.8.0
fastjsonschema	2.15.3
fonttools	4.43.0
fqdn	1.5.1

Library	Version
frozenset	1.4.1
fsspec	2024.3.1
gitdb	4.0.10
GitPython	3.1.41
greenlet	3.0.3
h11	0.14.0
httpcore	1.0.4
httpx	0.27.0
idna	2.1
importlib-resources	5.12.0
importlib_metadata	7.1.0
impyla	0.18.0
ipykernel	6.23.0
ipython	8.10.0
isoduration	20.11.0
jedi	0.19.1
jedi-language-server	0.41.4
Jinja2	3.1.3
jmespath	1.0.1
json5	0.9.5
jsonpatch	1.33
jsonpath-ng	1.6.1
jsonpointer	2.3
jsonschema	4.21.1
jsonschema-specifications	2023.12.1
jupyter-events	0.10.0
jupyter-lsp	2.2.2
jupyter-server-mathjax	0.2.6
jupyter-ydoc	2.0.1
jupyter_client	7.4.4
jupyter_collaboration	2.0.5
jupyter_core	5.3.0
jupyter_server	2.7.0
jupyter_server_fileid	0.9.1
jupyter_server_terminals	0.5.3
jupyterlab	4.1.5
jupyterlab-lsp	5.1.0
jupyterlab-pygments	0.1.2
jupyterlab_git	0.50.0

Library	Version
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
langchain	0.1.20
langchain-community	0.0.38
langchain-core	0.1.52
langchain-text-splitters	0.0.1
langsmith	0.1.56
loket	1.0.0
lsprotocol	2023.0.1
MarkupSafe	2.1.1
marshmallow	3.21.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
msgpack	1.0.8
multidict	6.0.5
mypy-extensions	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	4.0.1
nbformat	5.3.0
nest-asyncio	1.5.5
notebook_shim	0.2.3
numpy	1.24.4
orjson	3.10.3
overrides	7.7.0
packaging	23.2
pandas	2.0.3
pandocfilters	1.4.3
parso	0.8.3
partd	1.4.1
pexpect	4.8.0
pickleshare	0.7.5
pillow	10.3.0
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
ply	3.11
prometheus-client	0.9.0

Library	Version
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.5
pycparser	2.2
pycrdt	0.8.16
pycrdt-websocket	0.12.7
pydantic	2
pydantic_core	2.0.1
pygls	1.3.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6
pyzmq	25.1.2
referencing	0.34.0
regex	2024.5.10
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.18.0
s3transfer	0.10.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
sortedcontainers	2.4.0
soupsieve	2.3.2
SQLAlchemy	2.0.30
stack-data	0.6.2
tblib	3.0.0
tenacity	8.3.0
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3

Library	Version
tiktoken	0.6.0
tinycss2	1.1.1
tomli	2.0.1
toolz	0.12.1
tornado	6.3.3
traitlets	5.9.0
typing-inspect	0.9.0
typing_extensions	4.11.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
yaml	1.9.4
zict	3.0.0
zipp	3.15.0

Python 3.7 Libraries for JupyterLab

This section lists the packages in Python 3.7 JupyterLab Runtimes that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 25: Packages in Python 3.7.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2

Library	Version
certifi	2023.7.22
cff	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.41
idna	2.1
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.3
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2

Library	Version
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.2
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4

Library	Version
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

Table 26: Packages in Python 3.7.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1 + cuda11.8
libcudnn8-dev	8.7.0.84-1 + cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10
attrs	23.1.0
Babel	2.12.1

Library	Version
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2
certifi	2023.7.22
cfffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.41
idna	2.1
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.3
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0

Library	Version
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.2
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7

Library	Version
pytz	2021.1
PyYAML	6
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

R 4.4 Libraries

This section lists the R 4.4 libraries that ship with Cloudera Machine Learning Runtimes 2024.05.1.

Table 27: R 4.4 Libraries for Workbench

Library	Version
askpass	1.2.0
base	4.4.0
bitops	1.0-7
boot	1.3-30
brew	1.0-10

Library	Version
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-22
cli	3.6.2
cluster	2.1.6
codetools	0.2-20
colorspace	2.1-0
compiler	4.4.0
curl	5.2.1
datasets	4.4.0
fansi	1.0.6
farver	2.1.1
foreign	0.8-86
ggplot2	3.5.1
glue	1.7.0
graphics	4.4.0
grDevices	4.4.0
grid	4.4.0
gtable	0.3.5
httr	1.4.7
isoband	0.2.7
jsonlite	1.8.8
KernSmooth	2.23-22
labeling	0.4.3
lattice	0.22-6
lifecycle	1.0.4
magrittr	2.0.3
MASS	7.3-60.2
Matrix	1.7-0
methods	4.4.0
mgcv	1.9-1
mime	0.12
munsell	0.5.1
nlme	3.1-164
nnet	7.3-19
openssl	2.1.2
parallel	4.4.0
pillar	1.9.0

Library	Version
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.9
rlang	1.1.3
Rook	1.2
rpart	4.1.23
Rserve	1.7-0
scales	1.3.0
spatial	7.3-17
splines	4.4.0
stats	4.4.0
stats4	4.4.0
survival	3.5-8
sys	3.4.2
tcltk	4.4.0
tibble	3.2.1
tools	4.4.0
utf8	1.2.4
utils	4.4.0
vctrs	0.6.5
viridisLite	0.4.2
withr	3.0.0

ML Runtimes 2024.02.1

This section lists the Python, R, and Scala libraries that ship with ML Runtimes 2024.02.1



Note: Nvidia GPU Editions with a Workbench Editor come with CUDA 11.4.1 preinstalled.

All other Nvidia GPU Edition Runtimes come with CUDA 11.8.0 preinstalled.

Python 3.10 Libraries for Conda

This section lists the packages in Python 3.10 Conda Runtimes that ship with ML Runtimes 2024.02.1.

Table 28: Packages in Python 3.10 Conda Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2

Library	Version
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattrs	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.37
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2

Library	Version
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.25.2
packaging	23.1
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5

Library	Version
Pillow	10.0.1
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
tzdata	2023.3

Library	Version
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Python 3.10 Libraries for Workbench

This section lists the packages in Python 3.10 Workbench Runtimes that ship with ML Runtimes 2024.02.1.

Table 29: Packages in Python 3.10.9 Workbench Runtimes - Standard

Library	Version
asttokens	2.2.1
backcall	0.2.0
bitarray	2.7.3
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5

Library	Version
numpy	1.25.2
packaging	23.1
pandas	2.1.4
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5

Python 3.9 Libraries for Workbench

This section lists the packages in Python 3.9 Workbench Runtimes that ship with ML Runtimes 2024.02.1.

Table 30: Packages in Python 3.9.11 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0

Library	Version
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.25.2
packaging	23.1
pandas	2.1.4
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1

Library	Version
pyparsing	3.0.9
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Table 31: Packages in Python 3.9.11 Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-4	11.4.1-1
libcudnn8	8.2.2.26-1+cuda11.4
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0

Library	Version
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.25.2
packaging	23.1
pandas	2.1.4
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
tzdata	2023.3
urllib3	1.26.18

Library	Version
wcwidth	0.2.5
zipp	3.15.0

Python 3.8 Libraries for Workbench

This section lists the packages in Python 3.8 Workbench Runtimes that ship with ML Runtimes 2024.02.1.

Table 32: Packages in Python 3.8.16 Workbench Runtimes - Standard

Library	Version
cuda-libraries-11-4	11.4.1-1
libcudnn8	8.2.2.26-1+cuda11.4
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.24.4

Library	Version
packaging	23.1
pandas	2.0.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pytz	2023.3.post1
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Table 33: Packages in Python 3.8.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6

Library	Version
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.24.4
packaging	23.1
pandas	2.0.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2

Library	Version
pytz	2023.3.post1
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
tzdata	2023.3
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Python 3.7 Libraries for Workbench

This section lists the packages in Python 3.7 Workbench Runtimes that ship with ML Runtimes 2024.02.1.

Table 34: Packages in Python 3.7.16 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4

Library	Version
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.8.0

Table 35: Packages in Python 3.7.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-4	11.4.1-1
libcudnn8	8.2.2.26-1+cuda11.4
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2

Library	Version
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.8.0

Scala 2.11 Libraries for Workbench

This section lists the packages in Scala 2.11.12 Workbench Runtimes that ship with ML Runtimes 2024.02.1.

Scala 2.11.12 Libraries for Workbench - Standard

Library	Version
org.scala-lang:scala-library	2.11.12
org.scalatest:scalatest	2.2.4
org.scala-lang:scala-reflect	2.11.12
org.scala-lang:scala-compiler	2.11.12
io.circe:circe-generic	0.11.2
io.circe:circe-parser	0.11.2
org.scalameta:scalameta	1.0.0

Python 3.11 Libraries for JupyterLab

This section lists the packages in Python 3.11 JupyterLab Runtimes that ship with ML Runtimes 2024.02.1.

Table 36: Packages in Python 3.11.6 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	4.1.0
argon2-cffi	23.1.0
argon2-cffi-bindings	21.2.0
arrow	1.3.0
asttokens	2.4.1
attrs	23.1.0
Babel	2.13.1
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.8.3
bleach	6.1.0
cattrs	23.2.2
certifi	2023.11.17
cffi	1.16.0
charset-normalizer	3.3.2
colorama	0.4.6
comm	0.2.0
contourpy	1.2.0
cycler	0.12.1
debugpy	1.8.0
decorator	5.1.1
defusedxml	0.7.1
docstring-to-markdown	0.13

Library	Version
executing	2.0.1
fastjsonschema	2.19.0
fonttools	4.44.3
fqdn	1.5.1
gitdb	4.0.11
GitPython	3.1.40
idna	3.6
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.19.1
jedi-language-server	0.41.2
Jinja2	3.1.2
json5	0.9.14
jsonpointer	2.4
jsonschema	4.20.0
jsonschema-specifications	2023.11.1
jupyter-events	0.9.0
jupyter-lsp	2.2.1
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.5
jupyter_client	8.6.0
jupyter_core	5.5.0
jupyter_server	2.11.1
jupyter_server_fileid	0.9.0
jupyter_server_terminals	0.4.4
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab_pygments	0.3.0
jupyterlab_server	2.25.2
kerberos	1.3.1
kiwisolver	1.4.5
lsprotocol	2023.0.0
MarkupSafe	2.1.3
matplotlib	3.7.0

Library	Version
matplotlib-inline	0.1.6
mistune	3.0.2
nbclassic	1.0.0
nbclient	0.9.0
nbconvert	7.11.0
nbdime	3.2.1
nbformat	5.9.2
nest-asyncio	1.5.8
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.25.2
overrides	7.4.0
packaging	23.2
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.9.0
pickleshare	0.7.5
Pillow	10.1.0
platformdirs	4.0.0
prometheus-client	0.19.0
prompt-toolkit	3.0.41
psutil	5.9.6
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pygls	1.2.0
Pygments	2.17.2
pyparsing	3.1.1
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0.1
pyzmq	25.1.1
referencing	0.31.0
requests	2.31.0
rfc3339-validator	0.1.4

Library	Version
rfc3986-validator	0.1.1
rpds-py	0.13.1
Send2Trash	1.8.2
six	1.16.0
smmap	5.0.1
sniffio	1.3.0
soupsieve	2.5
stack-data	0.6.3
terminado	0.18.0
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.3.3
traitlets	5.14.0
types-python-dateutil	2.8.19.14
tzdata	2023.3
uri-template	1.3.0
urllib3	2.1.0
wcwidth	0.2.12
webcolors	1.13
webencodings	0.5.1
websocket-client	1.6.4
y-py	0.6.2
ypy-websocket	0.8.4

Table 37: Packages in Python 3.11.6 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	4.1.0
argon2-cffi	23.1.0
argon2-cffi-bindings	21.2.0
arrow	1.3.0
asttokens	2.4.1
attrs	23.1.0

Library	Version
Babel	2.13.1
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.8.3
bleach	6.1.0
cattr	23.2.2
certifi	2023.11.17
cffi	1.16.0
charset-normalizer	3.3.2
colorama	0.4.6
comm	0.2.0
contourpy	1.2.0
cycler	0.12.1
debugpy	1.8.0
decorator	5.1.1
defusedxml	0.7.1
docstring-to-markdown	0.13
executing	2.0.1
fastjsonschema	2.19.0
fonttools	4.44.3
fqdn	1.5.1
gitdb	4.0.11
GitPython	3.1.40
idna	3.6
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.19.1
jedi-language-server	0.41.2
Jinja2	3.1.2
json5	0.9.14
jsonpointer	2.4
jsonschema	4.20.0
jsonschema-specifications	2023.11.1
jupyter-events	0.9.0
jupyter-lsp	2.2.1
jupyter-server-mathjax	0.2.6

Library	Version
jupyter-ydoc	0.2.5
jupyter_client	8.6.0
jupyter_core	5.5.0
jupyter_server	2.11.1
jupyter_server_fileid	0.9.0
jupyter_server_terminals	0.4.4
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab_pygments	0.3.0
jupyterlab_server	2.25.2
kerberos	1.3.1
kiwisolver	1.4.5
lsprotocol	2023.0.0
MarkupSafe	2.1.3
matplotlib	3.7.0
matplotlib-inline	0.1.6
mistune	3.0.2
nbclassic	1.0.0
nbclient	0.9.0
nbconvert	7.11.0
nbdime	3.2.1
nbformat	5.9.2
nest-asyncio	1.5.8
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.25.2
overrides	7.4.0
packaging	23.2
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.9.0
pickleshare	0.7.5
Pillow	10.1.0
platformdirs	4.0.0
prometheus-client	0.19.0
prompt-toolkit	3.0.41

Library	Version
psutil	5.9.6
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pygls	1.2.0
Pygments	2.17.2
pyparsing	3.1.1
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0.1
pyzmq	25.1.1
referencing	0.31.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.13.1
Send2Trash	1.8.2
six	1.16.0
smmap	5.0.1
sniffio	1.3.0
soupsieve	2.5
stack-data	0.6.3
terminado	0.18.0
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.3.3
traitlets	5.14.0
types-python-dateutil	2.8.19.14
tzdata	2023.3
uri-template	1.3.0
urllib3	2.1.0
wcwidth	0.2.12
webcolors	1.13
webencodings	0.5.1
websocket-client	1.6.4

Library	Version
y-py	0.6.2
ypy-websocket	0.8.4

Python 3.10 Libraries for JupyterLab

This section lists the packages in Python 3.10 JupyterLab Runtimes that ship with ML Runtimes 2024.02.1.

Table 38: Packages in Python 3.10.9 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattr	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1

Library	Version
gitdb	4.0.10
GitPython	3.1.37
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0

Library	Version
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.25.2
packaging	23.1
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4

Library	Version
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Table 39: Packages in Python 3.10.9 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0

Library	Version
cattr	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.37
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0

Library	Version
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.25.2
packaging	23.1
pandas	2.1.4
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21

Library	Version
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Python 3.9 Libraries for JupyterLab

This section lists the packages in Python 3.9 JupyterLab Runtimes that ship with ML Runtimes 2024.02.1.

Table 40: Packages in Python 3.9.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattrs	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.37
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0

Library	Version
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4

Library	Version
notebook_shim	0.2.3
numpy	1.25.2
packaging	23.1
pandas	2.1.4
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0

Library	Version
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Table 41: Packages in Python 3.9.11 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0

Library	Version
certifi	2023.7.22
cff	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.37
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4

Library	Version
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.25.2
packaging	23.1
pandas	2.1.4
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1

Library	Version
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2023.3.post1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Python 3.8 Libraries for JupyterLab

This section lists the packages in Python 3.8 JupyterLab Runtimes that ship with ML Runtimes 2024.02.1.

Table 42: Packages in Python 3.8.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.37
idna	2.10

Library	Version
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0

Library	Version
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.24.4
packaging	23.1
pandas	2.0.3
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2

Library	Version
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Table 43: Packages in Python 3.8.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1

Library	Version
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.37
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0

Library	Version
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.24.4
packaging	23.1
pandas	2.0.3
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5

Library	Version
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pymq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
tzdata	2023.3
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1

Library	Version
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Python 3.7 Libraries for JupyterLab

This section lists the packages in Python 3.7 JupyterLab Runtimes that ship with ML Runtimes 2024.02.1.

Table 44: Packages in Python 3.7.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.37
idna	2.10
importlib-metadata	4.11.3

Library	Version
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3

Library	Version
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0

Library	Version
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

Table 45: Packages in Python 3.7.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3

Library	Version
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.37
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0

Library	Version
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1

Library	Version
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

R 4.3 Libraries

This section lists the R 4.3 libraries that ship with ML Runtimes 2024.02.1.

Table 46: R 4.3.1 Libraries for Workbench

Library	Version
askpass	1.1
base	4.3.1
bitops	1.0-7
boot	1.3-28.1
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-22
cli	3.6.1
cluster	2.1.4
codetools	0.2-19
colorspace	2.1-0
compiler	4.3.1
curl	5.0.1
datasets	4.3.1
fansi	1.0.4
farver	2.1.1
foreign	0.8-84
ggplot2	3.4.2

Library	Version
glue	1.6.2
graphics	4.3.1
grDevices	4.3.1
grid	4.3.1
gtable	0.3.3
httr	1.4.6
isoband	0.2.7
jsonlite	1.8.7
KernSmooth	2.23-21
labeling	0.4.2
lattice	0.21-8
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-60
Matrix	1.5-4.1
methods	4.3.1
mgcv	1.8-42
mime	0.12
munsell	0.5.0
nlme	3.1-162
nnet	7.3-19
openssl	2.0.6
parallel	4.3.1
pillar	1.9.0
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.8
rlang	1.1.1
Rook	1.2
rpart	4.1.19
Rserve	1.7-0
scales	1.2.1
spatial	7.3-16
splines	4.3.1
stats	4.3.1
stats4	4.3.1
survival	3.5-5

Library	Version
sys	3.4.2
tcltk	4.3.1
tibble	3.2.1
tools	4.3.1
utf8	1.2.3
utils	4.3.1
vctrs	0.6.3
viridisLite	0.4.2
withr	2.5.0

ML Runtimes 2023.12.1

This section lists the Python, R, and Scala libraries that ship with ML Runtimes 2023.12.1



Note: Nvidia GPU Editions with a Workbench Editor come with CUDA 11.4.1 preinstalled.

All other Nvidia GPU Edition Runtimes come with CUDA 11.8.0 preinstalled.

Python 3.10 Libraries for Conda

This section lists the packages in Python 3.10 Conda Runtimes that ship with ML Runtimes 2023.12.1.

Table 47: Packages in Python 3.10 Conda Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattrs	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6

Library	Version
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.35
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0

Library	Version
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.25.2
packaging	23.1
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2

Library	Version
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Python 3.10 Libraries for Workbench

This section lists the packages in Python 3.10 Workbench Runtimes that ship with ML Runtimes 2023.12.1.

Table 48: Packages in Python 3.10.9 Workbench Runtimes - Standard

Library	Version
asttokens	2.2.1
backcall	0.2.0
bitarray	2.7.3
certifi	2023.7.22

Library	Version
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.25.2
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0

Library	Version
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
urllib3	1.26.18
wcwidth	0.2.5

Python 3.9 Libraries for Workbench

This section lists the packages in Python 3.9 Workbench Runtimes that ship with ML Runtimes 2023.12.1.

Table 49: Packages in Python 3.9.11 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4

Library	Version
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.25.2
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Table 50: Packages in Python 3.9.11 Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-4	11.4.1-1
libcudnn8	8.2.2.26-1+cuda11.4
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0

Library	Version
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.25.2
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1

Library	Version
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Python 3.8 Libraries for Workbench

This section lists the packages in Python 3.8 Workbench Runtimes that ship with ML Runtimes 2023.12.1.

Table 51: Packages in Python 3.8.16 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0

Library	Version
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.24.4
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Table 52: Packages in Python 3.8.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-4	11.4.1-1
libcudnn8	8.2.2.26-1+cuda11.4
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.24.4
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prompt-toolkit	3.0.38

Library	Version
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.15.0

Python 3.7 Libraries for Workbench

This section lists the packages in Python 3.7 Workbench Runtimes that ship with ML Runtimes 2023.12.1.

Table 53: Packages in Python 3.7.16 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0

Library	Version
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.8.0

Table 54: Packages in Python 3.7.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-4	11.4.1-1
libcudnn8	8.2.2.26-1+cuda11.4
argcomplete	2.0.0
backcall	0.2.0

Library	Version
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1

Library	Version
typing_extensions	4.3.0
urllib3	1.26.18
wcwidth	0.2.5
zipp	3.8.0

Scala 2.11 Libraries for Workbench

This section lists the packages in Scala 2.11.12 Workbench Runtimes that ship with ML Runtimes 2023.08.

Scala 2.11.12 Libraries for Workbench - Standard

Library	Version
org.scala-lang:scala-library	2.11.12
org.scalatest:scalatest	2.2.4
org.scala-lang:scala-reflect	2.11.12
org.scala-lang:scala-compiler	2.11.12
io.circe:circe-generic	0.11.2
io.circe:circe-parser	0.11.2
org.scalameta:scalameta	1.0.0

Python 3.11 Libraries for JupyterLab

This section lists the packages in Python 3.11 JupyterLab Runtimes that ship with ML Runtimes 2023.12.1.

Table 55: Packages in Python 3.11.6 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	4.1.0
argon2-cffi	23.1.0
argon2-cffi-bindings	21.2.0
arrow	1.3.0
asttokens	2.4.1
attrs	23.1.0
Babel	2.13.1
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.8.3
bleach	6.1.0
cattr	23.2.2
certifi	2023.11.17
cffi	1.16.0
charset-normalizer	3.3.2

Library	Version
colorama	0.4.6
comm	0.2.0
contourpy	1.2.0
cycler	0.12.1
debugpy	1.8.0
decorator	5.1.1
defusedxml	0.7.1
docstring-to-markdown	0.13
executing	2.0.1
fastjsonschema	2.19.0
fonttools	4.44.3
fqdn	1.5.1
gitdb	4.0.11
GitPython	3.1.40
idna	3.6
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.19.1
jedi-language-server	0.41.2
Jinja2	3.1.2
json5	0.9.14
jsonpointer	2.4
jsonschema	4.20.0
jsonschema-specifications	2023.11.1
jupyter-events	0.9.0
jupyter-lsp	2.2.1
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.5
jupyter_client	8.6.0
jupyter_core	5.5.0
jupyter_server	2.11.1
jupyter_server_fileid	0.9.0
jupyter_server_terminals	0.4.4
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0

Library	Version
jupyterlab-lsp	4.1.0
jupyterlab_pygments	0.3.0
jupyterlab_server	2.25.2
kerberos	1.3.1
kiwisolver	1.4.5
lsprotocol	2023.0.0
MarkupSafe	2.1.3
matplotlib	3.7.0
matplotlib-inline	0.1.6
mistune	3.0.2
nbclassic	1.0.0
nbclient	0.9.0
nbconvert	7.11.0
nbdime	3.2.1
nbformat	5.9.2
nest-asyncio	1.5.8
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.25.2
overrides	7.4.0
packaging	23.2
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.9.0
pickleshare	0.7.5
Pillow	10.1.0
platformdirs	4.0.0
prometheus-client	0.19.0
prompt-toolkit	3.0.41
psutil	5.9.6
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pygls	1.2.0
Pygments	2.17.2
pyparsing	3.1.1
python-dateutil	2.8.2

Library	Version
python-json-logger	2.0.7
PyYAML	6.0.1
pyzmq	25.1.1
referencing	0.31.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.13.1
Send2Trash	1.8.2
six	1.16.0
smmap	5.0.1
sniffio	1.3.0
soupsieve	2.5
stack-data	0.6.3
terminado	0.18.0
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.3.3
traitlets	5.14.0
types-python-dateutil	2.8.19.14
uri-template	1.3.0
urllib3	2.1.0
wcwidth	0.2.12
webcolors	1.13
webencodings	0.5.1
websocket-client	1.6.4
y-py	0.6.2
ypy-websocket	0.8.4

Table 56: Packages in Python 3.11.6 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	4.1.0

Library	Version
argon2-cffi	23.1.0
argon2-cffi-bindings	21.2.0
arrow	1.3.0
asttokens	2.4.1
attrs	23.1.0
Babel	2.13.1
backcall	0.2.0
beautifulsoup4	4.12.2
bitarray	2.8.3
bleach	6.1.0
cattrs	23.2.2
certifi	2023.11.17
cffi	1.16.0
charset-normalizer	3.3.2
colorama	0.4.6
comm	0.2.0
contourpy	1.2.0
cycler	0.12.1
debugpy	1.8.0
decorator	5.1.1
defusedxml	0.7.1
docstring-to-markdown	0.13
executing	2.0.1
fastjsonschema	2.19.0
fonttools	4.44.3
fqdn	1.5.1
gitdb	4.0.11
GitPython	3.1.40
idna	3.6
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.19.1
jedi-language-server	0.41.2
Jinja2	3.1.2
json5	0.9.14
jsonpointer	2.4

Library	Version
jsonschema	4.20.0
jsonschema-specifications	2023.11.1
jupyter-events	0.9.0
jupyter-lsp	2.2.1
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.5
jupyter_client	8.6.0
jupyter_core	5.5.0
jupyter_server	2.11.1
jupyter_server_fileid	0.9.0
jupyter_server_terminals	0.4.4
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab_pygments	0.3.0
jupyterlab_server	2.25.2
kerberos	1.3.1
kiwisolver	1.4.5
lsprotocol	2023.0.0
MarkupSafe	2.1.3
matplotlib	3.7.0
matplotlib-inline	0.1.6
mistune	3.0.2
nbclassic	1.0.0
nbclient	0.9.0
nbconvert	7.11.0
nbdime	3.2.1
nbformat	5.9.2
nest-asyncio	1.5.8
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.25.2
overrides	7.4.0
packaging	23.2
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.9.0
pickleshare	0.7.5

Library	Version
Pillow	10.1.0
platformdirs	4.0.0
prometheus-client	0.19.0
prompt-toolkit	3.0.41
psutil	5.9.6
ptyprocess	0.7.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pygls	1.2.0
Pygments	2.17.2
pyparsing	3.1.1
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0.1
pyzmq	25.1.1
referencing	0.31.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
rpds-py	0.13.1
Send2Trash	1.8.2
six	1.16.0
smmap	5.0.1
sniffio	1.3.0
soupsieve	2.5
stack-data	0.6.3
terminado	0.18.0
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tornado	6.3.3
traitlets	5.14.0
types-python-dateutil	2.8.19.14
uri-template	1.3.0
urllib3	2.1.0
wcwidth	0.2.12
webcolors	1.13

Library	Version
webencodings	0.5.1
websocket-client	1.6.4
y-py	0.6.2
ypy-websocket	0.8.4

Python 3.10 Libraries for JupyterLab

This section lists the packages in Python 3.10 JupyterLab Runtimes that ship with ML Runtimes 2023.12.1.

Table 57: Packages in Python 3.10.9 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattrs	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3

Library	Version
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.35
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3

Library	Version
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.25.2
packaging	23.1
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4

Library	Version
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Table 58: Packages in Python 3.10.9 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattrs	22.2.0

Library	Version
certifi	2023.7.22
cff	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.35
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0

Library	Version
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.25.2
packaging	23.1
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1

Library	Version
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Python 3.9 Libraries for JupyterLab

This section lists the packages in Python 3.9 JupyterLab Runtimes that ship with ML Runtimes 2023.12.1.

Table 59: Packages in Python 3.9.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattrs	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.35
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0

Library	Version
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4

Library	Version
notebook_shim	0.2.3
numpy	1.25.2
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1

Library	Version
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Table 60: Packages in Python 3.9.11 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0

Library	Version
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.35
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1

Library	Version
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.25.2
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1

Library	Version
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Python 3.8 Libraries for JupyterLab

This section lists the packages in Python 3.8 JupyterLab Runtimes that ship with ML Runtimes 2023.12.1.

Table 61: Packages in Python 3.8.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattrs	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.35
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0

Library	Version
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4

Library	Version
notebook_shim	0.2.3
numpy	1.24.4
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0

Library	Version
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Table 62: Packages in Python 3.8.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattrs	22.2.0
certifi	2023.7.22

Library	Version
cff	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.35
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0

Library	Version
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.24.4
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20

Library	Version
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Python 3.7 Libraries for JupyterLab

This section lists the packages in Python 3.7 JupyterLab Runtimes that ship with ML Runtimes 2023.12.1.

Table 63: Packages in Python 3.7.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.35
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.1

Library	Version
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10

Library	Version
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

Table 64: Packages in Python 3.7.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
cuda-libraries-11-8	11.8.0-1
cuda-libraries-dev-11-8	11.8.0-1
libcudnn8	8.7.0.84-1+cuda11.8
libcudnn8-dev	8.7.0.84-1+cuda11.8
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.35

Library	Version
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschemata	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0

Library	Version
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.24.4
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	10.0.1
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2

Library	Version
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.18
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

R 4.3 Libraries

This section lists the R 4.3 libraries that ship with ML Runtimes 2023.12.1.

Table 65: R 4.3.1 Libraries for Workbench

Library	Version
askpass	1.1
base	4.3.1
bitops	1.0-7
boot	1.3-28.1
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-22
cli	3.6.1
cluster	2.1.4
codetools	0.2-19
colorspace	2.1-0
compiler	4.3.1

Library	Version
curl	5.0.1
datasets	4.3.1
fansi	1.0.4
farver	2.1.1
foreign	0.8-84
ggplot2	3.4.2
glue	1.6.2
graphics	4.3.1
grDevices	4.3.1
grid	4.3.1
gtable	0.3.3
httr	1.4.6
isoband	0.2.7
jsonlite	1.8.7
KernSmooth	2.23-21
labeling	0.4.2
lattice	0.21-8
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-60
Matrix	1.5-4.1
methods	4.3.1
mgcv	1.8-42
mime	0.12
munsell	0.5.0
nlme	3.1-162
nnet	7.3-19
openssl	2.0.6
parallel	4.3.1
pillar	1.9.0
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.8
rlang	1.1.1
Rook	1.2
rpart	4.1.19
Rserve	1.7-0

Library	Version
scales	1.2.1
spatial	7.3-16
splines	4.3.1
stats	4.3.1
stats4	4.3.1
survival	3.5-5
sys	3.4.2
tcltk	4.3.1
tibble	3.2.1
tools	4.3.1
utf8	1.2.3
utils	4.3.1
vctrs	0.6.3
viridisLite	0.4.2
withr	2.5.0

ML Runtimes 2023.08.2

This section lists the Python, R, and Scala libraries that ship with ML Runtimes 2023.08.2



Note: Nvidia GPU Editions with a Workbench Editor come with CUDA 11.4.1 preinstalled.

All other Nvidia GPU Edition Runtimes come with CUDA 11.8.0 preinstalled.

Python 3.10 Libraries for Conda

This section lists the packages in Python 3.10 Conda Runtimes that ship with ML Runtimes 2023.08.2.

Table 66: Packages in Python 3.10 Conda Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3

Library	Version
bleach	6.0.0
cattr	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.32
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4

Library	Version
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.24.2
packaging	23.1
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21

Library	Version
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.14
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Python 3.10 Libraries for Workbench

This section lists the packages in Python 3.10 Workbench Runtimes that ship with ML Runtimes 2023.08.2.

Table 67: Packages in Python 3.10.9 Workbench Runtimes - Standard

Library	Version
asttokens	2.2.1
backcall	0.2.0
bitarray	2.7.3
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.24.2
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2

Library	Version
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
urllib3	1.26.6
wcwidth	0.2.5

Python 3.9 Libraries for Workbench

This section lists the packages in Python 3.9 Workbench Runtimes that ship with ML Runtimes 2023.08.2.

Table 68: Packages in Python 3.9.11 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0

Library	Version
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.22.0
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Table 69: Packages in Python 3.9.11 Workbench Runtimes - Nvidia GPU Edition

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.22.0
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0

Library	Version
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Python 3.8 Libraries for Workbench

This section lists the packages in Python 3.8 Workbench Runtimes that ship with ML Runtimes 2023.08.2.

Table 70: Packages in Python 3.8.16 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2

Library	Version
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.22.0
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6

Library	Version
wcwidth	0.2.5
zipp	3.15.0

Table 71: Packages in Python 3.8.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.22.0
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0

Library	Version
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Python 3.7 Libraries for Workbench

This section lists the packages in Python 3.7 Workbench Runtimes that ship with ML Runtimes 2023.08.2.

Table 72: Packages in Python 3.7.16 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3

Library	Version
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 73: Packages in Python 3.7.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
argcomplete	2.0.0
backcall	0.2.0

Library	Version
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.15.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1

Library	Version
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Scala 2.11 Libraries for Workbench

This section lists the packages in Scala 2.11.12 Workbench Runtimes that ship with ML Runtimes 2023.08.

Scala 2.11.12 Libraries for Workbench - Standard

Library	Version
org.scala-lang:scala-library	2.11.12
org.scalatest:scalatest	2.2.4
org.scala-lang:scala-reflect	2.11.12
org.scala-lang:scala-compiler	2.11.12
io.circe:circe-generic	0.11.2
io.circe:circe-parser	0.11.2
org.scalameta:scalameta	1.0.0

Python 3.10 Libraries for JupyterLab

This section lists the packages in Python 3.10 JupyterLab Runtimes that ship with ML Runtimes 2023.08.2.

Table 74: Packages in Python 3.10.9 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattr	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0

Library	Version
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.32
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0

Library	Version
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.24.2
packaging	23.1
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3

Library	Version
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.14
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Table 75: Packages in Python 3.10.9 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3

Library	Version
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattrs	22.2.0
certifi	2023.7.22
cfffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.32
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3

Library	Version
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.24.2
packaging	23.1
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38

Library	Version
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.14
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1

Library	Version
y-py	0.5.9
ypy-websocket	0.8.2

Python 3.9 Libraries for JupyterLab

This section lists the packages in Python 3.9 JupyterLab Runtimes that ship with ML Runtimes 2023.08.2.

Table 76: Packages in Python 3.9.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattrs	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3

Library	Version
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.32
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0

Library	Version
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.22.0
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0

Library	Version
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Table 77: Packages in Python 3.9.11 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattrs	22.2.0
certifi	2023.7.22

Library	Version
cff	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.32
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0

Library	Version
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.22.0
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pyparser	2.20
pydantic	1.10.7

Library	Version
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Python 3.8 Libraries for JupyterLab

This section lists the packages in Python 3.8 JupyterLab Runtimes that ship with ML Runtimes 2023.08.2.

Table 78: Packages in Python 3.8.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattrs	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.32
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0

Library	Version
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4

Library	Version
notebook_shim	0.2.3
numpy	1.22.0
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0

Library	Version
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Table 79: Packages in Python 3.8.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3

Library	Version
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.32
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0

Library	Version
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.22.0
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.15.1
pyparsing	3.0.9

Library	Version
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Python 3.7 Libraries for JupyterLab

This section lists the packages in Python 3.7 JupyterLab Runtimes that ship with ML Runtimes 2023.08.2.

Table 80: Packages in Python 3.7.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.32
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.1

Library	Version
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10

Library	Version
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

Table 81: Packages in Python 3.7.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.32
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5

Library	Version
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
prometheus-client	0.9.0

Library	Version
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.15.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

R 4.3 Libraries

This section lists the R 4.3 libraries that ship with ML Runtimes 2023.08.2.

Table 82: R 4.1.3 Libraries for Workbench

Library	Version
askpass	1.1
base	4.3.1
bitops	1.0-7
boot	1.3-28.1
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-22
cli	3.6.1
cluster	2.1.4
codetools	0.2-19
colorspace	2.1-0
compiler	4.3.1
curl	5.0.0
datasets	4.3.1
fansi	1.0.4
farver	2.1.1
foreign	0.8-84
ggplot2	3.4.2
glue	1.6.2
graphics	4.3.1
grDevices	4.3.1
grid	4.3.1
gtable	0.3.3
httr	1.4.6
isoband	0.2.7
jsonlite	1.8.4
KernSmooth	2.23-21
labeling	0.4.2
lattice	0.21-8
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-60
Matrix	1.5-4.1

Library	Version
methods	4.3.1
mgcv	1.8-42
mime	0.12
munsell	0.5.0
nlme	3.1-162
nnet	7.3-19
openssl	2.0.6
parallel	4.3.1
pillar	1.9.0
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.8
rlang	1.1.1
Rook	1.2
rpart	4.1.19
Rserve	1.7-0
scales	1.2.1
spatial	7.3-16
splines	4.3.1
stats	4.3.1
stats4	4.3.1
survival	3.5-5
sys	3.4.1
tktk	4.3.1
tibble	3.2.1
tools	4.3.1
utf8	1.2.3
utils	4.3.1
vctrs	0.6.2
viridisLite	0.4.2
withr	2.5.0

R 4.1 Libraries

This section lists the R 4.1 libraries that ship with ML Runtimes 2023.08.2.

Table 83: R 4.1.1 Libraries for Workbench

Library	Version
askpass	1.1
base	4.1.1
bitops	1.0-7
boot	1.3-28
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-19
cli	3.6.1
cluster	2.1.2
codetools	0.2-18
colorspace	2.1-0
compiler	4.1.1
curl	5.0.0
datasets	4.1.1
fansi	1.0.4
farver	2.1.1
foreign	0.8-81
ggplot2	3.4.2
glue	1.6.2
graphics	4.1.1
grDevices	4.1.1
grid	4.1.1
gtable	0.3.3
httr	1.4.6
isoband	0.2.7
jsonlite	1.8.4
KernSmooth	2.23-20
labeling	0.4.2
lattice	0.20-44
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-54
Matrix	1.3-4
methods	4.1.1
mgcv	1.8-36

Library	Version
mime	0.12
munsell	0.5.0
nlme	3.1-152
nnet	7.3-16
openssl	2.0.6
parallel	4.1.1
pillar	1.9.0
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.8
rlang	1.1.1
Rook	1.2
rpart	4.1-15
Rserve	1.7-0
scales	1.2.1
spatial	7.3-14
splines	4.1.1
stats	4.1.1
stats4	4.1.1
survival	3.2-11
sys	3.4.1
tcltk	4.1.1
tibble	3.2.1
tools	4.1.1
utf8	1.2.3
utils	4.1.1
vctrs	0.6.2
viridisLite	0.4.2
withr	2.5.0

R 4.0 Libraries

This section lists the R 4.0 libraries that ship with ML Runtimes 2023.08.2.

Table 84: R 4.0.5 Libraries for Workbench

Library	Version
askpass	1.1
base	4.0.5

Library	Version
bitops	1.0-7
boot	1.3-27
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-18
cli	3.6.1
cluster	2.1.1
codetools	0.2-18
colorspace	2.1-0
compiler	4.0.5
curl	5.0.0
datasets	4.0.5
fansi	1.0.4
farver	2.1.1
foreign	0.8-81
ggplot2	3.4.2
glue	1.6.2
graphics	4.0.5
grDevices	4.0.5
grid	4.0.5
gtable	0.3.3
httr	1.4.6
isoband	0.2.7
jsonlite	1.8.4
KernSmooth	2.23-18
labeling	0.4.2
lattice	0.20-41
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-53.1
Matrix	1.3-2
methods	4.0.5
mgcv	1.8-34
mime	0.12
munsell	0.5.0
nlme	3.1-152
nnet	7.3-15

Library	Version
openssl	2.0.6
parallel	4.0.5
pillar	1.9.0
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.8
rlang	1.1.1
Rook	1.2
rpart	4.1-15
Rserve	1.7-0
scales	1.2.1
spatial	7.3-13
splines	4.0.5
stats	4.0.5
stats4	4.0.5
survival	3.2-10
sys	3.4.1
tcltk	4.0.5
tibble	3.2.1
tools	4.0.5
utf8	1.2.3
utils	4.0.5
vctrs	0.6.2
viridisLite	0.4.2
withr	2.5.0

R 3.6 Libraries

This section lists the R 3.6 libraries that ship with ML Runtimes 2023.08.2.

Table 85: R 3.6.3 Libraries for Workbench

Library	Version
askpass	1.1
base	3.6.3
bitops	1.0-7
boot	1.3-24
brew	1.0-8
Cairo	1.2-0

Library	Version
caTools	1.18.2
cdsw	2.1
class	7.3-15
cli	3.6.1
cluster	2.1.0
codetools	0.2-16
colorspace	2.1-0
compiler	3.6.3
curl	5.0.0
datasets	3.6.3
fansi	1.0.4
farver	2.1.1
foreign	0.8-75
ggplot2	3.4.2
glue	1.6.2
graphics	3.6.3
grDevices	3.6.3
grid	3.6.3
gtable	0.3.3
httr	1.4.6
isoband	0.2.7
jsonlite	1.8.4
KernSmooth	2.23-16
labeling	0.4.2
lattice	0.20-38
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-51.5
Matrix	1.2-18
methods	3.6.3
mgcv	1.8-31
mime	0.12
munsell	0.5.0
nlme	3.1-144
nnet	7.3-12
openssl	2.0.6
parallel	3.6.3
pillar	1.9.0
pkgconfig	2.0.3

Library	Version
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.8
rlang	1.1.1
Rook	1.2
rpart	4.1-15
Rserve	1.7-0
scales	1.2.1
spatial	7.3-11
splines	3.6.3
stats	3.6.3
stats4	3.6.3
survival	3.1-8
sys	3.4.1
tcltk	3.6.3
tibble	3.2.1
tools	3.6.3
utf8	1.2.3
utils	3.6.3
vctrs	0.6.2
viridisLite	0.4.2
withr	2.5.0

ML Runtimes 2023.08

This section lists the Python, R, and Scala libraries that ship with ML Runtimes 2023.08.



Note: Nvidia GPU Editions with a Workbench Editor come with CUDA 11.4.1 preinstalled.

All other Nvidia GPU Edition Runtimes come with CUDA 11.8.0 preinstalled.

Python 3.10 Libraries for Conda

This section lists the packages in Python 3.10 Conda Runtimes that ship with ML Runtimes 2023.08.

Table 86: Packages in Python 3.10 Conda Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0

Library	Version
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattrs	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11

Library	Version
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.24.2
packaging	23.1
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0

Library	Version
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.14
wcwidth	0.2.5
webcolors	1.13

Library	Version
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Python 3.10 Libraries for Workbench

This section lists the packages in Python 3.10 Workbench Runtimes that ship with ML Runtimes 2023.08.

Table 87: Packages in Python 3.10.9 Workbench Runtimes - Standard

Library	Version
asttokens	2.2.1
backcall	0.2.0
bitarray	2.7.3
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.24.2
packaging	23.1
parso	0.8.3
pexpect	4.8.0

Library	Version
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
urllib3	1.26.6
wcwidth	0.2.5

Python 3.9 Libraries for Workbench

This section lists the packages in Python 3.9 Workbench Runtimes that ship with ML Runtimes 2023.08.

Table 88: Packages in Python 3.9.11 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2

Library	Version
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.22.0
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3

Library	Version
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Table 89: Packages in Python 3.9.11 Workbench Runtimes - Nvidia GPU Edition

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.22.0
packaging	23.1

Library	Version
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Python 3.8 Libraries for Workbench

This section lists the packages in Python 3.8 Workbench Runtimes that ship with ML Runtimes 2023.08.

Table 90: Packages in Python 3.8.16 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3

Library	Version
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.22.0
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0

Library	Version
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Table 91: Packages in Python 3.8.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0

Library	Version
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.22.0
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.3.2
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Python 3.7 Libraries for Workbench

This section lists the packages in Python 3.7 Workbench Runtimes that ship with ML Runtimes 2023.08.

Table 92: Packages in Python 3.7.16 Workbench Runtimes - Standard

Library	Version
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0

Library	Version
certifi	2023.7.22
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0

Library	Version
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 93: Packages in Python 3.7.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2023.7.22
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9

Library	Version
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.31.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Scala 2.11 Libraries for Workbench

This section lists the packages in Scala 2.11.12 Workbench Runtimes that ship with ML Runtimes 2023.08..2

Scala 2.11.12 Libraries for Workbench - Standard

Library	Version
org.scala-lang:scala-library	2.11.12
org.scalatest:scalatest	2.2.4
org.scala-lang:scala-reflect	2.11.12
org.scala-lang:scala-compiler	2.11.12
io.circe:circe-generic	0.11.2
io.circe:circe-parser	0.11.2
org.scalameta:scalameta	1.0.0

Python 3.10 Libraries for JupyterLab

This section lists the packages in Python 3.10 JupyterLab Runtimes that ship with ML Runtimes 2023.08.

Table 94: Packages in Python 3.10.9 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1

Library	Version
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattr	22.2.0
certifi	2023.7.22
ffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0

Library	Version
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.24.2
packaging	23.1
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2

Library	Version
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.14
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Table 95: Packages in Python 3.10.9 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattrs	22.2.0
certifi	2023.7.22
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0

Library	Version
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.24.2
packaging	23.1
pandocfilters	1.5.0

Library	Version
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3

Library	Version
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.14
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Python 3.9 Libraries for JupyterLab

This section lists the packages in Python 3.9 JupyterLab Runtimes that ship with ML Runtimes 2023.08.

Table 96: Packages in Python 3.9.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattrs	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2

Library	Version
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1

Library	Version
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.22.0
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0

Library	Version
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Table 97: Packages in Python 3.9.11 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0

Library	Version
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3

Library	Version
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.22.0
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38

Library	Version
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1

Library	Version
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Python 3.8 Libraries for JupyterLab

This section lists the packages in Python 3.8 JupyterLab Runtimes that ship with ML Runtimes 2023.08.

Table 98: Packages in Python 3.8.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3

Library	Version
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5

Library	Version
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.22.0
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0

Library	Version
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Table 99: Packages in Python 3.8.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0

Library	Version
bleach	3.3.1
cattr	22.2.0
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.10.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0

Library	Version
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.22.0
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.38
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2

Library	Version
pure-sasl	0.6.2
py4j	0.10.9.1
pyparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.3.2
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2

Library	Version
zipp	3.15.0

Python 3.7 Libraries for JupyterLab

This section lists the packages in Python 3.7 JupyterLab Runtimes that ship with ML Runtimes 2023.08.

Table 100: Packages in Python 3.7.16 JupyterLab Runtimes - Standard

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.5.0

Library	Version
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3

Library	Version
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13

Library	Version
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

Table 101: Packages in Python 3.7.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2
certifi	2023.7.22
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0

Library	Version
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	1.0.0
nbclient	0.5.1
nbconvert	7.4.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.3
numpy	1.21.6
packaging	23.1

Library	Version
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.31.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5

Library	Version
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

R 4.3 Libraries

This section lists the R 4.3 libraries that ship with ML Runtimes 2023.08.

Table 102: R 4.1.3 Libraries for Workbench

Library	Version
askpass	1.1
base	4.3.1
bitops	1.0-7
boot	1.3-28.1
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-22
cli	3.6.1
cluster	2.1.4
codetools	0.2-19
colorspace	2.1-0
compiler	4.3.1
curl	5.0.0
datasets	4.3.1
fansi	1.0.4
farver	2.1.1
foreign	0.8-84
ggplot2	3.4.2
glue	1.6.2
graphics	4.3.1
grDevices	4.3.1
grid	4.3.1
gtable	0.3.3
httr	1.4.6
isoband	0.2.7

Library	Version
jsonlite	1.8.4
KernSmooth	2.23-21
labeling	0.4.2
lattice	0.21-8
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-60
Matrix	1.5-4.1
methods	4.3.1
mgcv	1.8-42
mime	0.12
munsell	0.5.0
nlme	3.1-162
nnet	7.3-19
openssl	2.0.6
parallel	4.3.1
pillar	1.9.0
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.8
rlang	1.1.1
Rook	1.2
rpart	4.1.19
Rserve	1.7-0
scales	1.2.1
spatial	7.3-16
splines	4.3.1
stats	4.3.1
stats4	4.3.1
survival	3.5-5
sys	3.4.1
tcltk	4.3.1
tibble	3.2.1
tools	4.3.1
utf8	1.2.3
utils	4.3.1
vctrs	0.6.2

Library	Version
viridisLite	0.4.2
withr	2.5.0

R 4.1 Libraries

This section lists the R 4.1 libraries that ship with ML Runtimes 2023.08.

Table 103: R 4.1.1 Libraries for Workbench

Library	Version
askpass	1.1
base	4.1.1
bitops	1.0-7
boot	1.3-28
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-19
cli	3.6.1
cluster	2.1.2
codetools	0.2-18
colorspace	2.1-0
compiler	4.1.1
curl	5.0.0
datasets	4.1.1
fansi	1.0.4
farver	2.1.1
foreign	0.8-81
ggplot2	3.4.2
glue	1.6.2
graphics	4.1.1
grDevices	4.1.1
grid	4.1.1
gtable	0.3.3
httr	1.4.6
isoband	0.2.7
jsonlite	1.8.4
KernSmooth	2.23-20
labeling	0.4.2
lattice	0.20-44

Library	Version
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-54
Matrix	1.3-4
methods	4.1.1
mgcv	1.8-36
mime	0.12
munsell	0.5.0
nlme	3.1-152
nnet	7.3-16
openssl	2.0.6
parallel	4.1.1
pillar	1.9.0
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.8
rlang	1.1.1
Rook	1.2
rpart	4.1-15
Rserve	1.7-0
scales	1.2.1
spatial	7.3-14
splines	4.1.1
stats	4.1.1
stats4	4.1.1
survival	3.2-11
sys	3.4.1
testthat	4.1.1
tibble	3.2.1
tools	4.1.1
utf8	1.2.3
utils	4.1.1
vctrs	0.6.2
viridisLite	0.4.2
withr	2.5.0

R 4.0 Libraries

This section lists the R 4.0 libraries that ship with ML Runtimes 2023.08.

Table 104: R 4.0.5 Libraries for Workbench

Library	Version
askpass	1.1
base	4.0.5
bitops	1.0-7
boot	1.3-27
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-18
cli	3.6.1
cluster	2.1.1
codetools	0.2-18
colorspace	2.1-0
compiler	4.0.5
curl	5.0.0
datasets	4.0.5
fansi	1.0.4
farver	2.1.1
foreign	0.8-81
ggplot2	3.4.2
glue	1.6.2
graphics	4.0.5
grDevices	4.0.5
grid	4.0.5
gtable	0.3.3
httr	1.4.6
isoband	0.2.7
jsonlite	1.8.4
KernSmooth	2.23-18
labeling	0.4.2
lattice	0.20-41
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-53.1
Matrix	1.3-2
methods	4.0.5
mgcv	1.8-34

Library	Version
mime	0.12
munsell	0.5.0
nlme	3.1-152
nnet	7.3-15
openssl	2.0.6
parallel	4.0.5
pillar	1.9.0
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.8
rlang	1.1.1
Rook	1.2
rpart	4.1-15
Rserve	1.7-0
scales	1.2.1
spatial	7.3-13
splines	4.0.5
stats	4.0.5
stats4	4.0.5
survival	3.2-10
sys	3.4.1
tcltk	4.0.5
tibble	3.2.1
tools	4.0.5
utf8	1.2.3
utils	4.0.5
vctrs	0.6.2
viridisLite	0.4.2
withr	2.5.0

R 3.6 Libraries

This section lists the R 3.6 libraries that ship with ML Runtimes 2023.08.

Table 105: R 3.6.3 Libraries for Workbench

Library	Version
askpass	1.1
base	3.6.3

Library	Version
bitops	1.0-7
boot	1.3-24
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-15
cli	3.6.1
cluster	2.1.0
codetools	0.2-16
colorspace	2.1-0
compiler	3.6.3
curl	5.0.0
datasets	3.6.3
fansi	1.0.4
farver	2.1.1
foreign	0.8-75
ggplot2	3.4.2
glue	1.6.2
graphics	3.6.3
grDevices	3.6.3
grid	3.6.3
gtable	0.3.3
httr	1.4.6
isoband	0.2.7
jsonlite	1.8.4
KernSmooth	2.23-16
labeling	0.4.2
lattice	0.20-38
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-51.5
Matrix	1.2-18
methods	3.6.3
mgcv	1.8-31
mime	0.12
munsell	0.5.0
nlme	3.1-144
nnet	7.3-12

Library	Version
openssl	2.0.6
parallel	3.6.3
pillar	1.9.0
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.8
rlang	1.1.1
Rook	1.2
rpart	4.1-15
Rserve	1.7-0
scales	1.2.1
spatial	7.3-11
splines	3.6.3
stats	3.6.3
stats4	3.6.3
survival	3.1-8
sys	3.4.1
tcltk	3.6.3
tibble	3.2.1
tools	3.6.3
utf8	1.2.3
utils	3.6.3
vctrs	0.6.2
viridisLite	0.4.2
withr	2.5.0

ML Runtimes 2023.05

This section lists the Python, R, and Scala libraries that ship with ML Runtimes 2023.05.



Note: Nvidia GPU Editions with a Workbench Editor come with CUDA 11.4.1 preinstalled.

All other Nvidia GPU Edition Runtimes come with CUDA 11.8.0 preinstalled.

Python 3.10 Libraries for Conda

This section lists the packages in Python 3.10 Conda Runtimes that ship with ML Runtimes 2023.05.

Table 106: Packages in Python 3.10 Conda Runtimes - Standard

Library	Version
python	3.10.9
pip	23.1.2
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattr	22.2.0
certifi	2022.12.7
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	3.4
impyla	0.18.0

Library	Version
ipykernel	6.22.0
ipython	8.1.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2

Library	Version
numpy	1.24.2
packaging	23.1
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.8
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.28.2
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1

Library	Version
tornado	6.1
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.14
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Python 3.9 Libraries for Workbench

This section lists the packages in Python 3.9 Workbench Runtimes that ship with ML Runtimes 2023.05.

Table 107: Packages in Python 3.9.11 Workbench Runtimes - Standard

Library	Version
python	3.9.11
pip	21.1.3
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0

Library	Version
ipython	8.1.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.8
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Table 108: Packages in Python 3.9.11 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.9.11
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.1.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0

Library	Version
platformdirs	3.5.0
prompt-toolkit	3.0.8
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Python 3.8 Libraries for Workbench

This section lists the packages in Python 3.8 Workbench Runtimes that ship with ML Runtimes 2023.05.

Table 109: Packages in Python 3.8.16 Workbench Runtimes - Standard

Library	Version
python	3.8.16
pip	23.1.2
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0

Library	Version
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.1.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.8
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
stack-data	0.6.2

Library	Version
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Table 110: Packages in Python 3.8.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.8.16
pip	23.1.2
cuda-libraries	11.4.1-1
libcudnn8	8.2.2.26-1
argcomplete	2.0.0
asttokens	2.2.1
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
entrypoints	0.4
executing	1.2.0
fonttools	4.39.3
idna	3.2
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.1.0
jedi	0.18.2
jupyter-client	7.2.2
jupyter_core	5.3.0
kerberos	1.3.1

Library	Version
kiwisolver	1.4.4
matplotlib	3.7.0
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
packaging	23.1
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prompt-toolkit	3.0.8
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
stack-data	0.6.2
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.9.0
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.15.0

Python 3.7 Libraries for Workbench

This section lists the packages in Python 3.7 Workbench Runtimes that ship with ML Runtimes 2023.05.

Table 111: Packages in Python 3.7.16 Workbench Runtimes - Standard

Library	Version
python	3.7.16

Library	Version
pip	23.1.2
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
thrift	0.16.0

Library	Version
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 112: Packages in Python 3.7.16 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.7.16
pip	23.1.2
cuda	11.4.1-1
libcudnn8	8.2.2.26
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter_core	4.12.0
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0

Library	Version
pickleshare	0.7.5
Pillow	9.3.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
thrift	0.16.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Scala 2.11 Libraries for Workbench

This section lists the packages in Scala 2.11.12 Workbench Runtimes that ship with ML Runtimes 2023.05.

Scala 2.11.12 Libraries for Workbench - Standard

Library	Version
org.scala-lang:scala-library	2.11.12
org.scalatest:scalatest	2.2.4
org.scala-lang:scala-reflect	2.11.12
org.scala-lang:scala-compiler	2.11.12
io.circe:circe-generic	0.11.2
io.circe:circe-parser	0.11.2
org.scalameta:scalameta	1.0.0

Python 3.10 Libraries for JupyterLab

This section lists the packages in Python 3.10 JupyterLab Runtimes that ship with ML Runtimes 2023.05.

Table 113: Packages in Python 3.10.9 JupyterLab Runtimes - Standard

Library	Version
python	3.10.9

Library	Version
pip	23.1.2
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattrs	22.2.0
certifi	2022.12.7
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.1.0
ipython-genutils	0.2.0

Library	Version
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.24.2
packaging	23.1
pandocfilters	1.5.0

Library	Version
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.8
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.28.2
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.1
traitlets	5.9.0
typeguard	2.13.3

Library	Version
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.14
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Table 114: Packages in Python 3.10.9 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.10.9
pip	23.1.2
cuda	11.8.0-1
libcudnn8	8.7.0.84
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.6.2
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
arrow	1.2.3
asttokens	2.2.1
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.2
bitarray	2.7.3
bleach	6.0.0
cattr	22.2.0
certifi	2022.12.7
cffi	1.15.1
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2

Library	Version
defusedxml	0.7.1
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.16.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	3.4
impyla	0.18.0
ipykernel	6.22.0
ipython	8.1.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.2
json5	0.9.11
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.23.4
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.2.2
jupyterlab_server	2.20.0
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1

Library	Version
MarkupSafe	2.1.2
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	2.0.5
nbclassic	0.5.3
nbclient	0.6.3
nbconvert	7.2.9
nbdime	3.2.0
nbformat	5.7.3
nest-asyncio	1.5.5
notebook	6.5.4
notebook_shim	0.2.2
numpy	1.24.2
packaging	23.1
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.5.0
platformdirs	3.5.0
prometheus-client	0.16.0
prompt-toolkit	3.0.8
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.19.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.28.2
rfc3339-validator	0.1.4

Library	Version
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.3.0
soupsieve	2.4
stack-data	0.6.2
terminado	0.17.1
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.2.1
tomli	2.0.1
tornado	6.1
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.5.0
uri-template	1.2.0
urllib3	1.26.14
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.5.1
y-py	0.5.9
ypy-websocket	0.8.2

Python 3.9 Libraries for JupyterLab

This section lists the packages in Python 3.9 JupyterLab Runtimes that ship with ML Runtimes 2023.05.

Table 115: Packages in Python 3.9.16 JupyterLab Runtimes - Standard

Library	Version
python	3.9.16
pip	23.1.2
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1

Library	Version
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattrs	22.2.0
certifi	2020.11.8
cfffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.1.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5

Library	Version
jsonpointer	2.3
jsonschemata	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.12
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prometheus-client	0.9.0

Library	Version
prompt-toolkit	3.0.8
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.29.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1

Library	Version
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Table 116: Packages in Python 3.9.11 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.9.16
pip	23.1.2
cuda	11.8.0-1
libcudnn8	8.7.0.84
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0
certifi	2020.11.8
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1

Library	Version
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.1.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0

Library	Version
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.12
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
PyYAML	6.0
pyzmq	22.3.0
requests	2.29.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0

Library	Version
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Python 3.8 Libraries for JupyterLab

This section lists the packages in Python 3.8 JupyterLab Runtimes that ship with ML Runtimes 2023.05.

Table 117: Packages in Python 3.8.16 JupyterLab Runtimes - Standard

Library	Version
python	3.8.16
pip	23.1.2
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0

Library	Version
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0
certifi	2020.11.8
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.1.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3

Library	Version
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.12
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8

Library	Version
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.29.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1

Library	Version
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Table 118: Packages in Python 3.8.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.8.16
pip	23.1.2
cuda	11.4.1-1
libcudnn8	8.7.0.84
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
asttokens	2.2.1
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cattr	22.2.0
certifi	2020.11.8
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
comm	0.1.3
contourpy	1.0.7
cycler	0.11.0
debugpy	1.6.7
decorator	4.4.2
defusedxml	0.6.0
docstring-to-markdown	0.12
entrypoints	0.4
exceptiongroup	1.1.1

Library	Version
executing	1.2.0
fastjsonschema	2.15.3
fonttools	4.39.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.22.0
ipython	8.1.0
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.18.2
jedi-language-server	0.40.0
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.6.3
jupyter-lsp	2.1.0
jupyter-server	1.24.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	5.3.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	4.1.0
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
lsprotocol	2023.0.0a1
MarkupSafe	2.1.1
matplotlib	3.7.0

Library	Version
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.12
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
platformdirs	3.5.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
psutil	5.9.5
ptyprocess	0.6.0
pure-eval	0.2.2
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
pydantic	1.10.7
pygls	1.0.1
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.29.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1

Library	Version
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
stack-data	0.6.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.9.0
typeguard	2.13.3
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.15.0

Python 3.7 Libraries for JupyterLab

This section lists the packages in Python 3.7 JupyterLab Runtimes that ship with ML Runtimes 2023.05.

Table 119: Packages in Python 3.7.16 JupyterLab Runtimes - Standard

Library	Version
python	3.7.16
pip	23.1.2
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10

Library	Version
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2
certifi	2020.11.8
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4

Library	Version
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.12
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2

Library	Version
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.29.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

Table 120: Packages in Python 3.7.16 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.7.16
pip	22.1.2
cuda	11.4.1-1
aiofiles	22.1.0
aiosqlite	0.19.0
anyio	3.3.0
argcomplete	2.0.0

Library	Version
argon2-cffi	20.1.0
arrow	1.2.3
async-generator	1.10
attrs	23.1.0
Babel	2.12.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
cached-property	1.5.2
certifi	2020.11.8
cffi	1.14.4
charset-normalizer	3.1.0
colorama	0.4.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
fqdn	1.5.1
gitdb	4.0.10
GitPython	3.1.31
idna	2.10
importlib-metadata	4.11.3
importlib-resources	5.12.0
impyla	0.18.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
isoduration	20.11.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonpointer	2.3
jsonschema	4.17.3
jupyter-client	7.2.2
jupyter-events	0.5.0
jupyter-lsp	1.5.1

Library	Version
jupyter-server	1.21.0
jupyter-server-mathjax	0.2.6
jupyter-ydoc	0.2.4
jupyter_core	4.12.0
jupyter_server_fileid	0.9.0
jupyter_server_ydoc	0.6.1
jupyterlab	3.6.0
jupyterlab-git	0.41.0
jupyterlab-lsp	3.10.2
jupyterlab-pygments	0.1.2
jupyterlab_server	2.22.1
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbdime	3.2.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.12
numpy	1.21.6
packaging	23.1
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.3.0
pkgutil_resolve_name	1.3.10
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pyparser	2.20
Pygments	2.8.1

Library	Version
pyparsing	3.0.9
pyrsistent	0.17.3
python-dateutil	2.8.2
python-json-logger	2.0.7
pytz	2021.1
PyYAML	6.0
pyzmq	22.3.0
requests	2.29.0
rfc3339-validator	0.1.4
rfc3986-validator	0.1.1
Send2Trash	1.8.0
six	1.16.0
smmap	5.0.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.16.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tomli	2.0.1
tornado	6.1
traitlets	5.1.1
typing_extensions	4.3.0
uri-template	1.2.0
urllib3	1.26.6
wcwidth	0.2.5
webcolors	1.13
webencodings	0.5.1
websocket-client	1.2.1
y-py	0.5.9
ypy-websocket	0.8.2
zipp	3.8.0

R 4.1 Libraries

This section lists the R 4.1 libraries that ship with ML Runtimes 2023.05.

Table 121: R 4.1.1 Libraries for Workbench

Library	Version
askpass	1.1

Library	Version
base	4.1.1
bitops	1.0-7
boot	1.3-28
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-19
cli	3.6.0
cluster	2.1.2
codetools	0.2-18
colorspace	2.1-0
compiler	4.1.1
curl	5.0.0
datasets	4.1.1
fansi	1.0.4
farver	2.1.1
foreign	0.8-81
ggplot2	3.4.0
glue	1.6.2
graphics	4.1.1
grDevices	4.1.1
grid	4.1.1
gtable	0.3.1
httr	1.4.4
isoband	0.2.7
jsonlite	1.8.4
KernSmooth	2.23-20
labeling	0.4.2
lattice	0.20-44
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-54
Matrix	1.3-4
methods	4.1.1
mgcv	1.8-36
mime	0.12
munsell	0.5.0
nlme	3.1-152

Library	Version
nnet	7.3-16
openssl	2.0.5
parallel	4.1.1
pillar	1.8.1
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.7
rlang	1.0.6
Rook	1.2
rpart	4.1-15
Rserve	1.7-0
scales	1.2.1
spatial	7.3-14
splines	4.1.1
stats	4.1.1
stats4	4.1.1
survival	3.2-11
sys	3.4.1
tcltk	4.1.1
tibble	3.1.8
tools	4.1.1
utf8	1.2.2
utils	4.1.1
vctrs	0.5.2
viridisLite	0.4.0
withr	2.5.0

R 4.0 Libraries

This section lists the R 4.0 libraries that ship with ML Runtimes 2023.05.

Table 122: R 4.0.5 Libraries for Workbench

Library	Version
askpass	1.1
base	4.0.5
bitops	1.0-7
boot	1.3-27
brew	1.0-8

Library	Version
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-18
cli	3.6.0
cluster	2.1.1
codetools	0.2-18
colorspace	2.1-0
compiler	4.0.5
curl	5.0.0
datasets	4.0.5
fansi	1.0.4
farver	2.1.1
foreign	0.8-81
ggplot2	3.4.0
glue	1.6.2
graphics	4.0.5
grDevices	4.0.5
grid	4.0.5
gtable	0.3.1
httr	1.4.4
isoband	0.2.7
jsonlite	1.8.4
KernSmooth	2.23-18
labeling	0.4.2
lattice	0.20-41
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-53.1
Matrix	1.3-2
methods	4.0.5
mgcv	1.8-34
mime	0.12
munsell	0.5.0
nlme	3.1-152
nnet	7.3-15
openssl	2.0.5
parallel	4.0.5
pillar	1.8.1

Library	Version
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3
RJSONIO	1.3-1.7
rlang	1.0.6
Rook	1.2
rpart	4.1-15
Rserve	1.7-0
scales	1.2.1
spatial	7.3-13
splines	4.0.5
stats	4.0.5
stats4	4.0.5
survival	3.2-10
sys	3.4.1
tcltk	4.0.5
tibble	3.1.8
tools	4.0.5
utf8	1.2.2
utils	4.0.5
vctrs	0.5.2
viridisLite	0.4.1
withr	2.5.0

R 3.6 Libraries

This section lists the R 3.6 libraries that ship with ML Runtimes 2023.05.

Table 123: R 3.6.3 Libraries for Workbench

Library	Version
askpass	1.1
base	3.6.3
bitops	1.0-7
boot	1.3-24
brew	1.0-8
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-15

Library	Version
cli	3.6.0
cluster	2.1.0
codetools	0.2-16
colorspace	2.1-0
compiler	3.6.3
curl	5.0.0
datasets	3.6.3
fansi	1.0.4
farver	2.1.1
foreign	0.8-75
ggplot2	3.4.0
glue	1.6.2
graphics	3.6.3
grDevices	3.6.3
grid	3.6.3
gtable	0.3.1
httr	1.4.4
isoband	0.2.7
jsonlite	1.8.4
KernSmooth	2.23-16
labeling	0.4.2
lattice	0.20-38
lifecycle	1.0.3
magrittr	2.0.3
MASS	7.3-51.5
Matrix	1.2-18
methods	3.6.3
mgcv	1.8-31
mime	0.12
munsell	0.5.0
nlme	3.1-144
nnet	7.3-12
openssl	2.0.5
parallel	3.6.3
pillar	1.8.2
pkgconfig	2.0.3
png	0.1-8
R6	2.5.1
RColorBrewer	1.1-3

Library	Version
RJSONIO	1.3-1.7
rlang	1.0.6
Rook	1.2
rpart	4.1-15
Rserve	1.7-0
scales	1.2.1
spatial	7.3-11
splines	3.6.3
stats	3.6.3
stats4	3.6.3
survival	3.1-8
sys	3.4.1
tcltk	3.6.3
tibble	3.1.8
tools	3.6.3
utf8	1.2.2
utils	3.6.3
vctrs	0.5.2
viridisLite	0.4.1
withr	2.5.0

ML Runtimes 2022.11

This section lists the Python, R, and Scala libraries that ship with ML Runtimes 2022.11.



Note: Nvidia GPU Edition comes with CUDA 11.4.1 preinstalled.

Python 3.9 Libraries for Workbench

This section lists the packages in Python 3.9 Workbench Runtimes that ship with ML Runtimes 2022.11.

Table 124: Packages in Python 3.9.11 Workbench Runtimes - Standard

Library	Version
python	3.9.6
pip	21.1.3
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6

Library	Version
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5

Library	Version
zipp	3.8.0

Table 125: Packages in Python 3.9.11 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.9.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1

Library	Version
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 126: Packages in Python 3.9.11 PBJ Workbench Runtimes - Standard

Library	Version
python	3.9.6
pip	21.1.3
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
attrs	21.4.0
backcall	0.2.0
bitarray	2.3.6
bleach	4.1.0
certifi	2021.10.8
cffi	1.15.0
charset-normalizer	2.0.11
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.4.0
impyla	0.17.0
ipykernel	6.9.0
ipython	7.31.1

Library	Version
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.0.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-core	4.9.1
jupyter-kernel-gateway	2.5.1
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.3.2
MarkupSafe	2.0.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclient	0.5.10
nbconvert	6.4.2
nbformat	5.1.3
nest-asyncio	1.5.4
notebook	6.4.8
numpy	1.21.5
packaging	21.3
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.13.1
prompt-toolkit	3.0.27
ptyprocess	0.7.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
Pygments	2.11.2
pyparsing	3.0.7
pyrsistent	0.18.1
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.27.1
Send2Trash	1.8.0

Library	Version
six	1.16.0
terminado	0.13.1
testpath	0.5.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.0.1
urllib3	1.26.8
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.7.0

Python 3.8 Libraries for Workbench

This section lists the packages in Python 3.8 Workbench Runtimes that ship with ML Runtimes 2022.11.

Table 127: Packages in Python 3.8.13 Workbench Runtimes - Standard

Library	Version
python	3.8.6
pip	21.1.3
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.4.4

Library	Version
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 128: Packages in Python 3.8.13 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.8.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.11.0

Library	Version
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 129: Packages in Python 3.8.13 PBJ Workbench Runtimes - Standard

Library	Version
python	3.8.6
pip	21.1.3
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
attrs	21.4.0
backcall	0.2.0
bitarray	2.3.6
bleach	4.1.0
certifi	2021.10.8
cffi	1.15.0
charset-normalizer	2.0.11
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.4.0
impyla	0.17.0
ipykernel	6.9.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.0.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-core	4.9.1
jupyter-kernel-gateway	2.5.1
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.3.2
MarkupSafe	2.0.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclient	0.5.10
nbconvert	6.4.2

Library	Version
nbformat	5.1.3
nest-asyncio	1.5.4
notebook	6.4.8
numpy	1.21.5
packaging	21.3
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.13.1
prompt-toolkit	3.0.27
ptyprocess	0.7.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
Pygments	2.11.2
pyparsing	3.0.7
pyrsistent	0.18.1
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.27.1
Send2Trash	1.8.0
six	1.16.0
terminado	0.13.1
testpath	0.5.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.0.1
urllib3	1.26.8
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.7.0

Python 3.7 Libraries for Workbench

This section lists the packages in Python 3.7 Workbench Runtimes that ship with ML Runtimes 2022.11.

Table 130: Packages in Python 3.7.13 Workbench Runtimes - Standard

Library	Version
python	3.7.13
pip	21.1.3
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pymzmq	22.3.0

Library	Version
requests	2.26.0
six	1.16.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 131: Packages in Python 3.7.13 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.7.13
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.6.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.4.4
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5

Library	Version
numpy	1.21.6
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	3.0.9
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.16.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 132: Packages in Python 3.7.13 PBJ Workbench - Standard

Library	Version
python	3.7.13
pip	21.1.3
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
attrs	21.4.0
backcall	0.2.0
bitarray	2.3.6
bleach	4.1.0
certifi	2021.10.8
cffi	1.15.0
charset-normalizer	2.0.11
cycler	0.11.0
debugpy	1.5.1

Library	Version
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.4.0
impyla	0.17.0
ipykernel	6.9.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.0.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-core	4.9.1
jupyter-kernel-gateway	2.5.1
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.3.2
MarkupSafe	2.0.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclient	0.5.10
nbconvert	6.4.2
nbformat	5.1.3
nest-asyncio	1.5.4
notebook	6.4.8
numpy	1.21.5
packaging	21.3
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.13.1
prompt-toolkit	3.0.27
ptyprocess	0.7.0
pure-sasl	0.6.2

Library	Version
py4j	0.10.9.1
pycparser	2.21
Pygments	2.11.2
pyparsing	3.0.7
pyrsistent	0.18.1
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.27.1
Send2Trash	1.8.0
six	1.16.0
terminado	0.13.1
testpath	0.5.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.0.1
urllib3	1.26.8
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.7.0

Scala 2.11 Libraries for Workbench

This section lists the packages in Scala 2.11.12 Workbench Runtimes that ship with ML Runtimes 2022.11.

Scala 2.11.12 Libraries for Workbench - Standard

Library	Version
org.scala-lang:scala-library	2.11.12
org.scalatest:scalatest	2.2.4
org.scala-lang:scala-reflect	2.11.12
org.scala-lang:scala-compiler	2.11.12
io.circe:circe-generic	0.11.2
io.circe:circe-parser	0.11.2
org.scalameta:scalameta	1.0.0

Python 3.9.6 Libraries for JupyterLab

This section lists the packages in Python 3.9 JupyterLab Runtimes that ship with ML Runtimes 2022.11.

Table 133: Packages in Python 3.9.11 JupyterLab Runtimes - Standard

Library	Version
python	3.9.6
pip	21.1.3
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2

Library	Version
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.21.6
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0

Library	Version
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Table 134: Packages in Python 3.9.11 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.9.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3

Library	Version
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.21.6
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20

Library	Version
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Python 3.8 Libraries for JupyterLab

This section lists the packages in Python 3.8 JupyterLab Runtimes that ship with ML Runtimes 2022.11.

Table 135: Packages in Python 3.8.13 JupyterLab Runtimes - Standard

Library	Version
python	3.8.13
pip	21.1.3
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1

Library	Version
bitarray	2.6.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5

Library	Version
notebook	6.4.3
numpy	1.21.6
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Table 136: Packages in Python 3.8.13 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.8.13
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8

Library	Version
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.21.6
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2

Library	Version
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.3.0
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Python 3.7 Libraries for JupyterLab

This section lists the packages in Python 3.7 JupyterLab Runtimes that ship with ML Runtimes 2022.11.

Table 137: Packages in Python 3.7.13 JupyterLab Runtimes - Standard

Library	Version
python	3.7.13
pip	21.1.3
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.6.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3

Library	Version
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.21.6
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2

Library	Version
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Table 138: Packages in Python 3.7.13 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.7.13
pip	21.1.3
cuda	11.4.1-1
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1

Library	Version
bitarray	2.6.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.11.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.4.4
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5

Library	Version
notebook	6.4.3
numpy	1.21.6
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

R 4.1 Libraries

This section lists the R 4.1 libraries that ship with ML Runtimes 2022.11.

Table 139: PBJ R 4.1.1 Libraries for Workbench

Library	Version
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
attrs	21.4.0
backcall	0.2.0
bitarray	2.3.6
bleach	4.1.0
certifi	2021.10.8
cffi	1.15.0
charset-normalizer	2.0.11
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.4.0
impyla	0.17.0
ipykernel	6.9.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.0.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-core	4.9.1
jupyter-kernel-gateway	2.5.1
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.3.2
MarkupSafe	2.0.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclient	0.5.10
nbconvert	6.4.2
nbformat	5.1.3

Library	Version
nest-asyncio	1.5.4
notebook	6.4.8
numpy	1.21.5
packaging	21.3
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.13.1
prompt-toolkit	3.0.27
ptyprocess	0.7.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
Pygments	2.11.2
pyparsing	3.0.7
pyrsistent	0.18.1
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.27.1
Send2Trash	1.8.0
six	1.16.0
terminado	0.13.1
testpath	0.5.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.0.1
urllib3	1.26.8
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.7.0

Table 140: R 4.1.1 Libraries for Workbench

Library	Version
askpass	1.1
base	4.1.1

Library	Version
bitops	1.0-7
boot	1.3-28
brew	1.0-6
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-19
cli	3.0.1
cluster	2.1.2
codetools	0.2-18
colorspace	2.0-2
compiler	4.1.1
crayon	1.4.1
curl	4.3.2
datasets	4.1.1
digest	0.6.27
ellipsis	0.3.2
fansi	0.5.0
farver	2.1.0
foreign	0.8-81
ggplot2	3.3.5
glue	1.4.2
graphics	4.1.1
grDevices	4.1.1
grid	4.1.1
gtable	0.3.0
httr	1.4.2
isoband	0.2.5
jsonlite	1.7.2
KernSmooth	2.23-20
labeling	0.4.2
lattice	0.20-44
lifecycle	1.0.0
magrittr	2.0.1
MASS	7.3-54
Matrix	1.3-4
methods	4.1.1
mgcv	1.8-36
mime	0.11

Library	Version
munsell	0.5.0
nlme	3.1-152
nnet	7.3-16
openssl	1.4.4
parallel	4.1.1
pillar	1.6.2
pkgconfig	2.0.3
png	0.1-7
R6	2.5.1
RColorBrewer	1.1-2
RJSONIO	1.3-1.5
rlang	0.4.11
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.1
spatial	7.3-14
splines	4.1.1
stats	4.1.1
stats4	4.1.1
survival	3.2-11
sys	3.4
tcltk	4.1.1
tibble	3.1.4
tools	4.1.1
utf8	1.2.2
utils	4.1.1
vctrs	0.3.8
viridisLite	0.4.0
withr	2.4.2

R 4.0 Libraries

This section lists the R 4.0 libraries that ship with ML Runtimes 2022.11.

Table 141: PBJ R 4.0.5 Libraries for Workbench

Library	Version
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
attrs	21.4.0

Library	Version
backcall	0.2.0
bitarray	2.3.6
bleach	4.1.0
certifi	2021.10.8
cffi	1.15.0
charset-normalizer	2.0.11
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.4.0
impyla	0.17.0
ipykernel	6.9.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.0.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-core	4.9.1
jupyter-kernel-gateway	2.5.1
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.3.2
MarkupSafe	2.0.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclient	0.5.10
nbconvert	6.4.2
nbformat	5.1.3
nest-asyncio	1.5.4
notebook	6.4.8
numpy	1.21.5
packaging	21.3
pandocfilters	1.5.0

Library	Version
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.13.1
prompt-toolkit	3.0.27
ptyprocess	0.7.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
Pygments	2.11.2
pyparsing	3.0.7
pyrsistent	0.18.1
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.27.1
Send2Trash	1.8.0
six	1.16.0
terminado	0.13.1
testpath	0.5.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.0.1
urllib3	1.26.8
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.7.0

Table 142: R 4.0.5 Libraries for Workbench

Library	Version
askpass	1.1
base	4.0.5
bitops	1.0-7
boot	1.3-27
brew	1.0-6
Cairo	1.2-0
caTools	1.18.2

Library	Version
cdsw	2.1
class	7.3-18
cli	3.0.1
cluster	2.1.1
codetools	0.2-18
colorspace	2.0-2
compiler	4.0.5
crayon	1.4.1
curl	4.3.2
datasets	4.0.5
digest	0.6.27
ellipsis	0.3.2
fansi	0.5.0
farver	2.1.0
foreign	0.8-81
ggplot2	3.3.5
glue	1.4.2
graphics	4.0.5
grDevices	4.0.5
grid	4.0.5
gtable	0.3.0
httr	1.4.2
isoband	0.2.5
jsonlite	1.7.2
KernSmooth	2.23-18
labeling	0.4.2
lattice	0.20-41
lifecycle	1.0.0
magrittr	2.0.1
MASS	7.3-53.1
Matrix	1.3-2
methods	4.0.5
mgcv	1.8-34
mime	0.11
munsell	0.5.0
nlme	3.1-152
nnet	7.3-15
openssl	1.4.4
parallel	4.0.5

Library	Version
pillar	1.6.2
pkgconfig	2.0.3
png	0.1-7
R6	2.5.1
RColorBrewer	1.1-2
RJSONIO	1.3-1.5
rlang	0.4.11
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.1
spatial	7.3-13
splines	4.0.5
stats	4.0.5
stats4	4.0.5
survival	3.2-10
sys	3.4
tcltk	4.0.5
tibble	3.1.4
tools	4.0.5
utf8	1.2.2
utils	4.0.5
vctrs	0.3.8
viridisLite	0.4.0
withr	2.4.2

R 3.6 Libraries

This section lists the R 3.6 libraries that ship with ML Runtimes 2022.11.

Table 143: PBJ R 3.6.3 Libraries for Workbench

Library	Version
argon2-cffi	21.3.0
argon2-cffi-bindings	21.2.0
attrs	21.4.0
backcall	0.2.0
bitarray	2.3.6
bleach	4.1.0
certifi	2021.10.8
cffi	1.15.0

Library	Version
charset-normalizer	2.0.11
cycler	0.11.0
debugpy	1.5.1
decorator	5.1.1
defusedxml	0.7.1
entrypoints	0.4
idna	3.3
importlib-metadata	4.11.0
importlib-resources	5.4.0
impyla	0.17.0
ipykernel	6.9.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.18.1
Jinja2	3.0.3
jsonschema	4.4.0
jupyter-client	7.1.2
jupyter-core	4.9.1
jupyter-kernel-gateway	2.5.1
jupyterlab-pygments	0.1.2
kerberos	1.3.1
kiwisolver	1.3.2
MarkupSafe	2.0.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclient	0.5.10
nbconvert	6.4.2
nbformat	5.1.3
nest-asyncio	1.5.4
notebook	6.4.8
numpy	1.21.5
packaging	21.3
pandocfilters	1.5.0
parso	0.8.3
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.13.1

Library	Version
prompt-toolkit	3.0.27
ptyprocess	0.7.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.21
Pygments	2.11.2
pyparsing	3.0.7
pyrsistent	0.18.1
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.27.1
Send2Trash	1.8.0
six	1.16.0
terminado	0.13.1
testpath	0.5.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.0.1
urllib3	1.26.8
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.7.0

Table 144: R 3.6.3 Libraries for Workbench

Library	Version
askpass	1.1
base	3.6.3
bitops	1.0-7
boot	1.3-24
brew	1.0-6
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-15
cli	3.0.1
cluster	2.1.0
codetools	0.2-16

Library	Version
colorspace	2.0-2
compiler	3.6.3
crayon	1.4.1
curl	4.3.2
datasets	3.6.3
digest	0.6.27
ellipsis	0.3.2
fansi	0.5.0
farver	2.1.0
foreign	0.8-75
ggplot2	3.3.5
glue	1.4.2
graphics	3.6.3
grDevices	3.6.3
grid	3.6.3
gtable	0.3.0
httr	1.4.2
isoband	0.2.5
jsonlite	1.7.2
KernSmooth	2.23-16
labeling	0.4.2
lattice	0.20-38
lifecycle	1.0.0
magrittr	2.0.1
MASS	7.3-51.5
Matrix	1.2-18
methods	3.6.3
mgcv	1.8-31
mime	0.11
munsell	0.5.0
nlme	3.1-144
nnet	7.3-12
openssl	1.4.4
parallel	3.6.3
pillar	1.6.2
pkgconfig	2.0.3
png	0.1-7
R6	2.5.1
RColorBrewer	1.1-2

Library	Version
RJSONIO	1.3-1.5
rlang	0.4.11
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.1
spatial	7.3-11
splines	3.6.3
stats	3.6.3
stats4	3.6.3
survival	3.1-8
sys	3.4
tcltk	3.6.3
tibble	3.1.4
tools	3.6.3
utf8	1.2.2
utils	3.6.3
vctrs	0.3.8
viridisLite	0.4.0
withr	2.4.2

ML Runtimes 2022.04

This section lists the Python, R, and Scala libraries that ship with ML Runtimes 2022.04.



Note: Nvidia GPU Edition comes with CUDA 11.4.1 preinstalled.

Python 3.9 Libraries for Workbench

This section lists the packages in Python 3.9 Workbench Runtimes that ship with ML Runtimes 2022.04.

Table 145: Packages in Python 3.9.11 Workbench Runtimes - Standard

Library	Version
python	3.9.6
pip	21.1.3
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6

Library	Version
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5

Library	Version
zipp	3.8.0

Table 146: Packages in Python 3.9.11 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.9.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1

Library	Version
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Python 3.8 Libraries for Workbench

This section lists the packages in Python 3.8 Workbench Runtimes that ship with ML Runtimes 2022.04.

Table 147: Packages in Python 3.8.13 Workbench Runtimes - Standard

Library	Version
python	3.8.6
pip	21.1.3
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2

Library	Version
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 148: Packages in Python 3.8.13 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.8.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30

Library	Version
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6

Library	Version
wcwidth	0.2.5
zipp	3.8.0

Python 3.7 Libraries for Workbench

This section lists the packages in Python 3.7 Workbench Runtimes that ship with ML Runtimes 2022.04.

Table 149: Packages in Python 3.7.13 Workbench Runtimes - Standard

Library	Version
python	3.7.11
pip	21.1.3
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0

Library	Version
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 150: Packages in Python 3.7.13 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.7.11
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
argcomplete	2.0.0
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
entrypoints	0.4
idna	3.2
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
jedi	0.17.2
jupyter-client	7.2.2

Library	Version
jupyter-core	4.9.2
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
nest-asyncio	1.5.5
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.2
pyzmq	22.3.0
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5
zipp	3.8.0

Table 151: Packages in Python 3.7.13 PBJ Workbench - Standard

Library	Version
python	3.7.11
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0

Library	Version
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4

Library	Version
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5

Library	Version
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Scala 2.11 Libraries for Workbench

This section lists the packages in Scala 2.11.12 Workbench Runtimes that ship with ML Runtimes 2022.04.

Scala 2.11.12 Libraries for Workbench - Standard

Library	Version
org.scala-lang:scala-library	2.11.12
org.scalatest:scalatest	2.2.4
org.scala-lang:scala-reflect	2.11.12
org.scala-lang:scala-compiler	2.11.12
io.circe:circe-generic	0.11.2
io.circe:circe-parser	0.11.2
org.scalameta:scalameta	1.0.0

Python 3.9.6 Libraries for JupyterLab

This section lists the packages in Python 3.9 JupyterLab Runtimes that ship with ML Runtimes 2022.04.

Table 152: Packages in Python 3.9.11 JupyterLab Runtimes - Standard

Library	Version
python	3.9.6
pip	21.1.3
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0

Library	Version
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1

Library	Version
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Table 153: Packages in Python 3.9.11 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.9.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0

Library	Version
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4

Library	Version
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5

Library	Version
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Python 3.8 Libraries for JupyterLab

This section lists the packages in Python 3.8 JupyterLab Runtimes that ship with ML Runtimes 2022.04.

Table 154: Packages in Python 3.8.13 JupyterLab Runtimes - Standard

Library	Version
python	3.8.6
pip	21.1.3
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1

Library	Version
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0

Library	Version
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Table 155: Packages in Python 3.8.13 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.8.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0

Library	Version
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5

Library	Version
Pillow	9.0.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Python 3.7 Libraries for JupyterLab

This section lists the packages in Python 3.7 JupyterLab Runtimes that ship with ML Runtimes 2022.04.

Table 156: Packages in Python 3.7.13 JupyterLab Runtimes - Standard

Library	Version
python	3.7.11
pip	21.1.3
anyio	3.3.0

Library	Version
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	2.1.1
matplotlib	3.3.4

Library	Version
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1

Library	Version
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

Table 157: Packages in Python 3.7.13 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.7.11
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argcomplete	2.0.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
beautifulsoup4	4.11.1
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
debugpy	1.6.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.4
fastjsonschema	2.15.3
idna	2.10
importlib-metadata	4.11.3
impyla	0.17.0
ipykernel	6.5.0
ipython	7.31.1
ipython-genutils	0.2.0
jedi	0.17.2

Library	Version
Jinja2	3.1.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	7.2.2
jupyter-core	4.9.2
jupyter-server	1.16.0
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	2.1.1
matplotlib	3.3.4
matplotlib-inline	0.1.3
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.5.0
nbformat	5.3.0
nest-asyncio	1.5.5
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	9.0.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.2
pytz	2021.1

Library	Version
pyzmq	22.3.0
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
soupsieve	2.3.2
terminado	0.9.2
thrift	0.11.0
thrift-sasl	0.4.3
tinycss2	1.1.1
tornado	6.1
traitlets	5.1.1
typing-extensions	4.1.1
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.8.0

R 4.0 Libraries

This section lists the R 4.0 libraries that ship with ML Runtimes 2022.04.

Table 158: R 4.0.5 Libraries for Workbench

Library	Version
askpass	1.1
base	4.0.5
bitops	1.0-7
boot	1.3-27
brew	1.0-6
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-18
cli	3.0.1
cluster	2.1.1
codetools	0.2-18
colorspace	2.0-2
compiler	4.0.5
crayon	1.4.1

Library	Version
curl	4.3.2
datasets	4.0.5
digest	0.6.27
ellipsis	0.3.2
fansi	0.5.0
farver	2.1.0
foreign	0.8-81
ggplot2	3.3.5
glue	1.4.2
graphics	4.0.5
grDevices	4.0.5
grid	4.0.5
gtable	0.3.0
httr	1.4.2
isoband	0.2.5
jsonlite	1.7.2
KernSmooth	2.23-18
labeling	0.4.2
lattice	0.20-41
lifecycle	1.0.0
magrittr	2.0.1
MASS	7.3-53.1
Matrix	1.3-2
methods	4.0.5
mgcv	1.8-34
mime	0.11
munsell	0.5.0
nlme	3.1-152
nnet	7.3-15
openssl	1.4.4
parallel	4.0.5
pillar	1.6.2
pkgconfig	2.0.3
png	0.1-7
R6	2.5.1
RColorBrewer	1.1-2
RJSONIO	1.3-1.5
rlang	0.4.11
Rook	1.1-1

Library	Version
rpart	4.1-15
Rserve	1.7-0
scales	1.1.1
spatial	7.3-13
splines	4.0.5
stats	4.0.5
stats4	4.0.5
survival	3.2-10
sys	3.4
tcltk	4.0.5
tibble	3.1.4
tools	4.0.5
utf8	1.2.2
utils	4.0.5
vctrs	0.3.8
viridisLite	0.4.0
withr	2.4.2

R 4.1 Libraries

This section lists the R 4.1 libraries that ship with ML Runtimes 2022.04.

Table 159: R 4.1.1 Libraries for Workbench

Library	Version
askpass	1.1
base	4.1.1
bitops	1.0-7
boot	1.3-28
brew	1.0-6
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-19
cli	3.0.1
cluster	2.1.2
codetools	0.2-18
colorspace	2.0-2
compiler	4.1.1
crayon	1.4.1
curl	4.3.2

Library	Version
datasets	4.1.1
digest	0.6.27
ellipsis	0.3.2
fansi	0.5.0
farver	2.1.0
foreign	0.8-81
ggplot2	3.3.5
glue	1.4.2
graphics	4.1.1
grDevices	4.1.1
grid	4.1.1
gtable	0.3.0
httr	1.4.2
isoband	0.2.5
jsonlite	1.7.2
KernSmooth	2.23-20
labeling	0.4.2
lattice	0.20-44
lifecycle	1.0.0
magrittr	2.0.1
MASS	7.3-54
Matrix	1.3-4
methods	4.1.1
mgcv	1.8-36
mime	0.11
munsell	0.5.0
nlme	3.1-152
nnet	7.3-16
openssl	1.4.4
parallel	4.1.1
pillar	1.6.2
pkgconfig	2.0.3
png	0.1-7
R6	2.5.1
RColorBrewer	1.1-2
RJSONIO	1.3-1.5
rlang	0.4.11
Rook	1.1-1
rpart	4.1-15

Library	Version
Rserve	1.7-0
scales	1.1.1
spatial	7.3-14
splines	4.1.1
stats	4.1.1
stats4	4.1.1
survival	3.2-11
sys	3.4
tktk	4.1.1
tibble	3.1.4
tools	4.1.1
utf8	1.2.2
utils	4.1.1
vctrs	0.3.8
viridisLite	0.4.0
withr	2.4.2

R 3.6 Libraries

This section lists the R 3.6 libraries that ship with ML Runtimes 2022.04.

Table 160: R 3.6.3 Libraries for Workbench

Library	Version
askpass	1.1
base	3.6.3
bitops	1.0-7
boot	1.3-24
brew	1.0-6
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-15
cli	3.0.1
cluster	2.1.0
codetools	0.2-16
colorspace	2.0-2
compiler	3.6.3
crayon	1.4.1
curl	4.3.2
datasets	3.6.3

Library	Version
digest	0.6.27
ellipsis	0.3.2
fansi	0.5.0
farver	2.1.0
foreign	0.8-75
ggplot2	3.3.5
glue	1.4.2
graphics	3.6.3
grDevices	3.6.3
grid	3.6.3
gtable	0.3.0
httr	1.4.2
isoband	0.2.5
jsonlite	1.7.2
KernSmooth	2.23-16
labeling	0.4.2
lattice	0.20-38
lifecycle	1.0.0
magrittr	2.0.1
MASS	7.3-51.5
Matrix	1.2-18
methods	3.6.3
mgcv	1.8-31
mime	0.11
munsell	0.5.0
nlme	3.1-144
nnet	7.3-12
openssl	1.4.4
parallel	3.6.3
pillar	1.6.2
pkgconfig	2.0.3
png	0.1-7
R6	2.5.1
RColorBrewer	1.1-2
RJSONIO	1.3-1.5
rlang	0.4.11
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0

Library	Version
scales	1.1.1
spatial	7.3-11
splines	3.6.3
stats	3.6.3
stats4	3.6.3
survival	3.1-8
sys	3.4
tcltk	3.6.3
tibble	3.1.4
tools	3.6.3
utf8	1.2.2
utils	3.6.3
vctrs	0.3.8
viridisLite	0.4.0
withr	2.4.2

ML Runtimes 2021.12

This section lists the Python, R, and Scala libraries that ship with ML Runtimes 2021.12.



Note: Nvidia GPU Edition comes with CUDA 11.4.1 preinstalled.

Python 3.9 Libraries for Workbench

This section lists the packages in Python 3.9 Workbench Runtimes that ship with ML Runtimes 2021.12.

Table 161: Packages in Python 3.9.7 Workbench Runtimes - Standard

Library	Version
python	3.9.6
pip	21.1.3
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
idna	3.2
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1

Library	Version
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Table 162: Packages in Python 3.9.7 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.9.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6

Library	Version
cycler	0.10.0
decorator	4.4.2
idna	3.2
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Python 3.8 Libraries for Workbench

This section lists the packages in Python 3.8 Workbench Runtimes that ship with ML Runtimes 2021.12.

Table 163: Packages in Python 3.8.6 Workbench Runtimes - Standard

Library	Version
python	3.8.6
pip	21.1.3
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
idna	3.2
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1

Library	Version
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Table 164: Packages in Python 3.8.6 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.8.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
idna	3.2
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1

Library	Version
pyzmq	19.0.2
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Table 165: Packages in Python 3.8.6 Workbench Runtimes - RAPIDS

Library	Version
python	3.8.6
pip	21.1.3
_libgcc_mutex	0.1
_openmp_mutex	4.5
abseil-cpp	20210324.2
aiohttp	3.8.1
aiosignal	1.2.0
anyio	3.4.0
appdirs	1.4.4
argon2-cffi	21.1.0
arrow-cpp	5.0.0
arrow-cpp-proc	3.0.0
async-timeout	4.0.1
async_generator	1.10
attrs	21.2.0
aws-c-auth	0.6.7
aws-c-cal	0.5.12
aws-c-common	0.6.17
aws-c-compression	0.2.14
aws-c-event-stream	0.2.7
aws-c-http	0.6.10
aws-c-io	0.10.13
aws-c-mqtt	0.7.9
aws-c-s3	0.1.27
aws-c-sdkutils	0.1.1
aws-checksums	0.1.12
aws-crt-cpp	0.17.8

Library	Version
aws-sdk-cpp	1.9.145
backcall	0.2.0
backports	1.0
backports.functools_lru_cache	1.6.4
bleach	4.1.0
blosc	1.21.0
bokeh	2.4.0
boost	1.74.0
boost-cpp	1.74.0
brotli	1.0.9
brotli-bin	1.0.9
brotlipy	0.7.0
brunsli	0.1
bzip2	1.0.8
c-ares	1.18.1
c-blosc2	2.0.4
ca-certificates	2021.10.8
cachetools	4.2.4
cairo	1.16.0
cdsw	1.1.0
certifi	2021.5.30
cffi	1.15.0
cfitsio	3.470
charls	2.2.0
charset-normalizer	2.0.6
click	8.0.3
click-plugins	1.1.1
cligj	0.7.2
cloudpickle	2.0.0
colorama	0.4.4
colorcet	3.0.0
cryptography	36.0.1
cucim	21.12.00
cuda-toolkit	11.0.221
cudf	21.12.02
cudf_kafka	21.12.02
cudnn	8.2.1.32
cugraph	21.12.00
cuml	21.12.00

Library	Version
cupy	9.6.0
curl	7.80.0
cusignal	21.12.00
cuspatial	21.12.00
custreamz	21.12.02
cuxfilter	21.12.00
cycler	0.11.0
cyrus-sasl	2.1.27
cytoolz	0.11.2
dask	2021.11.2
dask-core	2021.11.2
dask-cuda	21.12.00
dask-cudf	21.12.02
datashader	0.11.1
datashape	0.5.4
debugpy	1.5.1
decorator	5.1.0
defusedxml	0.7.1
distributed	2021.11.2
dlpack	0.5
entrypoints	0.3
expat	2.4.1
faiss-proc	1.0.0
fastavro	1.4.7
fastrlock	0.8
fiona	1.8.20
font-ttf-dejavu-sans-mono	2.37
font-ttf-inconsolata	3.000
font-ttf-source-code-pro	2.038
font-ttf-ubuntu	0.83
fontconfig	2.13.1
fonts-conda-ecosystem	1
fonts-conda-forge	1
fonttools	4.28.4
freetype	2.10.4
freexl	1.0.6
frozenlist	1.2.0
fsspec	2021.11.1
gdal	3.3.2

Library	Version
geopandas	0.9.0
geopandas-base	0.9.0
geos	3.9.1
geotiff	1.7.0
gettext	0.19.8.1
gflags	2.2.2
giflib	5.2.1
git	2.34.1
glog	0.5.0
gpuci-tools	0.3.1
grpc-cpp	1.41.1
hdf4	4.2.15
hdf5	1.12.1
heapdict	1.0.1
icu	68.2
idna	3.2
imagecodecs	2021.8.26
imageio	2.13.3
importlib-metadata	4.8.3
importlib_metadata	4.8.3
importlib_resources	5.4.0
ipykernel	6.6.0
ipython	7.30.1
ipython_genutils	0.2.0
ipywidgets	7.6.5
jbig	2.1
jedi	0.18.1
jinja2	3.0.3
joblib	1.1.0
jpeg	9d
json-c	0.15
jsonschema	4.3.1
jupyter-server-proxy	3.2.0
jupyter_client	7.1.0
jupyter_core	4.9.1
jupyter_server	1.13.1
jupyterlab_pygments	0.1.2
jupyterlab_widgets	1.0.2
jxrllib	1.1

Library	Version
kealib	1.4.14
kiwisolver	1.3.2
krb5	1.19.2
lcms2	2.12
ld_impl_linux-64	2.36.1
lerc	3.0
libaec	1.0.6
libblas	3.9.0
libbrotlicommon	1.0.9
libbrotlidec	1.0.9
libbrotlienc	1.0.9
libcblas	3.9.0
libcucim	21.12.00
libcudf	21.12.02
libcudf_kafka	21.12.02
libcugraph	21.12.00
libcuml	21.12.00
libcumlprims	21.12.00
libcurl	7.80.0
libcusolver	11.3.2.107
libcuspatial	21.12.00
libdap4	3.20.6
libdeflate	1.8
libedit	3.1.20191231
libev	4.33
libevent	2.1.10
libfaiss	1.7.0
libffi	3.4.2
libgcc-ng	9.4.0
libgcrypt	1.9.4
libgdal	3.3.2
libgfortran-ng	11.2.0
libgfortran5	11.2.0
libglib	2.70.2
libgpg-error	1.42
libgsasl	1.10.0
libhwloc	2.3.0
libiconv	1.16
libkml	1.3.0

Library	Version
liblapack	3.9.0
libllvm11	11.1.0
libnetcdf	4.8.1
libnghttp2	1.43.0
libnsl	2.0.0
libntlm	1.4
libopenblas	0.3.18
libpng	1.6.37
libpq	13.5
libprotobuf	3.18.1
librdkafka	1.6.1
librmm	21.12.00
librttopo	1.1.0
libsodium	1.0.18
libspatialindex	1.9.3
libspatialite	5.0.1
libssh2	1.10.0
libstdcxx-ng	9.4.0
libthrift	0.15.0
libtiff	4.3.0
libutf8proc	2.7.0
libuuid	2.32.1
libuv	1.42.0
libwebp	1.2.1
libwebp-base	1.2.1
libxcb	1.13
libxgboost	1.5.0dev.rapidsai21.12
libxml2	2.9.12
libzip	1.8.0
libzlib	1.2.11
libzopfli	1.0.3
llvm-openmp	12.0.1
llvmlite	0.37.0
locket	0.2.0
lz4-c	1.9.3
mapclassify	2.4.3
markdown	3.3.6
markupsafe	2.0.1
matplotlib-base	3.5.1

Library	Version
matplotlib-inline	0.1.3
mistune	0.8.4
msgpack-python	1.0.3
multidict	5.2.0
multipledispatch	0.6.0
munch	2.5.0
munkres	1.1.4
nbclient	0.5.9
nbconvert	6.3.0
nbformat	5.1.3
nccl	2.11.4.1
ncurses	6.2
nest-asyncio	1.5.4
networkx	2.6.3
nodejs	14.17.4
notebook	6.4.6
nspr	4.32
nss	3.73
numba	0.54.1
numpy	1.20.3
nvtx	0.2.3
olefile	0.46
openjpeg	2.4.0
openssl	1.1.1i
orc	1.7.1
packaging	21.3
pandas	1.3.5
pandoc	2.16.2
pandocfilters	1.5.0
panel	0.12.4
param	1.12.0
parquet-cpp	1.5.1
parso	0.8.3
partd	1.2.0
pcre	8.45
pcre2	10.37
perl	5.32.1
pexpect	4.8.0
pickleshare	0.7.5

Library	Version
pillow	8.4.0
pip	21.3.1
pixman	0.40.0
pooch	1.5.2
poppler	21.09.0
poppler-data	0.4.11
postgresql	13.5
proj	8.1.0
prometheus_client	0.12.0
prompt-toolkit	3.0.24
protobuf	3.18.1
psutil	5.8.0
pthread-stubs	0.4
ptxcompiler	0.2.0
ptyprocess	0.7.0
py-xgboost	1.5.0dev.rapidsai21.12
py4j	0.10.9
pyarrow	5.0.0
pycparser	2.21
pyct	0.4.6
pyct-core	0.4.6
pydeck	0.5.0
pyee	8.1.0
pygments	2.10.0
pynvml	11.4.1
pyopenssl	21.0.0
pyparsing	3.0.6
pypeteer	0.2.6
pyproj	3.1.0
pyrsistent	0.18.0
pysocks	1.7.1
python	3.8.12
python-confluent-kafka	1.6.0
python-dateutil	2.8.2
python_abi	3.8
pytz	2021.3
pyviz_comms	2.1.0
pywavelets	1.2.0
pyyaml	6.0

Library	Version
pyzmq	22.3.0
rapids	21.12.00
rapids-xgboost	21.12.00
re2	2021.11.01
readline	8.1
requests	2.26.0
rmm	21.12.00
rtree	0.9.7
s2n	1.3.0
scikit-image	0.18.1
scikit-learn	1.0.1
scipy	1.7.3
send2trash	1.8.0
setuptools	59.6.0
shapely	1.8.0
simpervisor	0.4
six	1.16.0
snappy	1.1.8
sniffio	1.2.0
sortedcontainers	2.4.0
spdlog	1.8.5
sqlite	3.37.0
streamz	0.6.3
tblib	1.7.0
terminado	0.12.1
testpath	0.5.0
threadpoolctl	3.0.0
tifffile	2021.11.2
tiledb	2.3.4
tk	8.6.11
toolz	0.11.2
tornado	6.1
tqdm	4.62.3
traitlets	5.1.1
treelite	2.1.0
treelite-runtime	2.1.0
typing-extensions	4.0.1
typing_extensions	4.0.1
tzcode	2021e

Library	Version
tzdata	2021e
ucx	1.11.2+gef2bbcf
ucx-proc	1.0.0
ucx-py	0.23.0
unicodedata2	13.0.0.post2
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.3
websockets	9.1
wheel	0.37.0
widetsnbextension	3.5.2
xarray	0.20.2
xerces-c	3.2.3
xgboost	1.5.0dev.rapidsai21.12
xorg-kbproto	1.0.7
xorg-libice	1.0.10
xorg-libsm	1.2.3
xorg-libx11	1.7.2
xorg-libxau	1.0.9
xorg-libxdmcp	1.1.3
xorg-libxext	1.3.4
xorg-libxrender	0.9.10
xorg-renderproto	0.11.1
xorg-xextproto	7.3.0
xorg-xproto	7.0.31
xz	5.2.5
yaml	0.2.5
yaml	1.7.2
zeromq	4.3.4
zfp	0.5.5
zict	2.0.0
zipp	3.6.0
zlib	1.2.11
zstd	1.5.0

Python 3.7 Libraries for Workbench

This section lists the packages in Python 3.7 Workbench Runtimes that ship with ML Runtimes 2021.12.

Table 166: Packages in Python 3.7.11 Workbench Runtimes - Standard

Library	Version
python	3.7.11
pip	21.1.3
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
idna	3.2
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1

Library	Version
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Table 167: Packages in Python 3.7.11 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.7.11
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
backcall	0.2.0
bitarray	2.1.0
certifi	2021.5.30
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
idna	3.2
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1

Library	Version
pyzmq	19.0.2
requests	2.26.0
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Table 168: Packages in Python 3.7.11 Workbench Runtimes - RAPIDS

Library	Version
python	3.7.11
pip	21.1.3
cuda	11.4.1-1
_libgcc_mutex	0.1
_openmp_mutex	4.5
abseil-cpp	20210324.2
aiohttp	3.8.1
aiosignal	1.2.0
anyio	3.4.0
appdirs	1.4.4
argcomplete	1.12.3
argon2-cffi	21.1.0
arrow-cpp	5.0.0
arrow-cpp-proc	3.0.0
async-timeout	4.0.1
async_generator	1.10
asynctest	0.13.0
attrs	21.2.0
aws-c-auth	0.6.7
aws-c-cal	0.5.12
aws-c-common	0.6.17
aws-c-compression	0.2.14
aws-c-event-stream	0.2.7
aws-c-http	0.6.10
aws-c-io	0.10.13
aws-c-mqtt	0.7.9
aws-c-s3	0.1.27

Library	Version
aws-c-sdkutils	0.1.1
aws-checksums	0.1.12
aws-crt-cpp	0.17.8
aws-sdk-cpp	1.9.145
backcall	0.2.0
backports	1.0
backports.functools_lru_cache	1.6.4
bleach	4.1.0
blosc	1.21.0
bokeh	2.4.0
boost	1.74.0
boost-cpp	1.74.0
brotli	1.0.9
brotli-bin	1.0.9
brotlipy	0.7.0
brunsli	0.1
bzip2	1.0.8
c-ares	1.18.1
c-blosc2	2.0.4
ca-certificates	2021.10.8
cachetools	4.2.4
cairo	1.16.0
cdsw	1.1.0
certifi	2021.5.30
cffi	1.15.0
cfitsio	3.470
charls	2.2.0
charset-normalizer	2.0.6
click	8.0.3
click-plugins	1.1.1
cligj	0.7.2
cloudpickle	2.0.0
colorama	0.4.4
colorcet	3.0.0
cryptography	36.0.1
cucim	21.12.00
cuda-toolkit	11.0.221
cudf	21.12.02
cudf_kafka	21.12.02

Library	Version
cudnn	8.2.1.32
cugraph	21.12.00
cuml	21.12.00
cupy	9.6.0
curl	7.80.0
cusignal	21.12.00
cuspatial	21.12.00
custreamz	21.12.02
cuxfilter	21.12.00
cycler	0.11.0
cyrus-sasl	2.1.27
cytoolz	0.11.2
dask	2021.11.2
dask-core	2021.11.2
dask-cuda	21.12.00
dask-cudf	21.12.02
datashader	0.11.1
datashape	0.5.4
debugpy	1.5.1
decorator	5.1.0
defusedxml	0.7.1
distributed	2021.11.2
dlpack	0.5
entrypoints	0.3
expat	2.4.1
faiss-proc	1.0.0
fastavro	1.4.7
fastrlock	0.8
fiona	1.8.20
font-ttf-dejavu-sans-mono	2.37
font-ttf-inconsolata	3.000
font-ttf-source-code-pro	2.038
font-ttf-ubuntu	0.83
fontconfig	2.13.1
fonts-conda-ecosystem	1
fonts-conda-forge	1
fonttools	4.28.4
freetype	2.10.4
freexl	1.0.6

Library	Version
frozenset	1.2.0
fsspec	2021.11.1
gdal	3.3.2
geopandas	0.9.0
geopandas-base	0.9.0
geos	3.9.1
geotiff	1.7.0
gettext	0.19.8.1
gflags	2.2.2
giflib	5.2.1
git	2.34.1
glog	0.5.0
gpuci-tools	0.3.1
grpc-cpp	1.41.1
hdf4	4.2.15
hdf5	1.12.1
heapdict	1.0.1
icu	68.2
idna	3.2
imagecodecs	2021.8.26
imageio	2.13.3
importlib-metadata	4.8.3
importlib_metadata	4.8.3
importlib_resources	5.4.0
ipykernel	6.6.0
ipython	7.30.1
ipython_genutils	0.2.0
ipywidgets	7.6.5
jbig	2.1
jedi	0.18.1
jinja2	3.0.3
joblib	1.1.0
jpeg	9d
json-c	0.15
jsonschema	4.3.1
jupyter-server-proxy	3.2.0
jupyter_client	7.1.0
jupyter_core	4.9.1
jupyter_server	1.13.1

Library	Version
jupyterlab_pygments	0.1.2
jupyterlab_widgets	1.0.2
jxrlib	1.1
kealib	1.4.14
kiwisolver	1.3.2
krb5	1.19.2
lcms2	2.12
ld_impl_linux-64	2.36.1
lerc	3.0
libaec	1.0.6
libblas	3.9.0
libbrotlicommon	1.0.9
libbrotlidec	1.0.9
libbrotlienc	1.0.9
libcblas	3.9.0
libcucim	21.12.00
libcudf	21.12.02
libcudf_kafka	21.12.02
libcugraph	21.12.00
libcuml	21.12.00
libcumlprims	21.12.00
libcurl	7.80.0
libcusolver	11.3.2.107
libcuspatial	21.12.00
libdap4	3.20.6
libdeflate	1.8
libedit	3.1.20191231
libev	4.33
libevent	2.1.10
libfaiss	1.7.0
libffi	3.4.2
libgcc-ng	9.4.0
libgcrypt	1.9.4
libgdal	3.3.2
libgfortran-ng	11.2.0
libgfortran5	11.2.0
libglib	2.70.2
libgpg-error	1.42
libgsasl	1.10.0

Library	Version
libhwloc	2.3.0
libiconv	1.16
libkml	1.3.0
liblapack	3.9.0
libllvm11	11.1.0
libnetcdf	4.8.1
libnghttp2	1.43.0
libnsl	2.0.0
libntlm	1.4
libopenblas	0.3.18
libpng	1.6.37
libpq	13.5
libprotobuf	3.18.1
librdkafka	1.6.1
librmm	21.12.00
librttopo	1.1.0
libsodium	1.0.18
libspatialindex	1.9.3
libspatialite	5.0.1
libssh2	1.10.0
libstdc++-ng	9.4.0
libthrift	0.15.0
libtiff	4.3.0
libutf8proc	2.7.0
libuuid	2.32.1
libuv	1.42.0
libwebp	1.2.1
libwebp-base	1.2.1
libxcb	1.13
libxgboost	1.5.0dev.rapidsai21.12
libxml2	2.9.12
libzip	1.8.0
libzlib	1.2.11
libzopfli	1.0.3
llvm-openmp	12.0.1
llvmlite	0.37.0
loket	0.2.0
lz4-c	1.9.3
mapclassify	2.4.3

Library	Version
markdown	3.3.6
markupsafe	2.0.1
matplotlib-base	3.5.1
matplotlib-inline	0.1.3
mistune	0.8.4
msgpack-python	1.0.3
multidict	5.2.0
multipledispatch	0.6.0
munch	2.5.0
munkres	1.1.4
nbclient	0.5.9
nbconvert	6.3.0
nbformat	5.1.3
nccl	2.11.4.1
ncurses	6.2
nest-asyncio	1.5.4
networkx	2.6.3
nodejs	14.17.4
notebook	6.4.6
nspr	4.32
nss	3.73
numba	0.54.1
numpy	1.20.3
nvtx	0.2.3
olefile	0.46
openjpeg	2.4.0
openssl	1.1.11
orc	1.7.1
packaging	21.3
pandas	1.3.5
pandoc	2.16.2
pandocfilters	1.5.0
panel	0.12.4
param	1.12.0
parquet-cpp	1.5.1
parso	0.8.3
partd	1.2.0
pcre	8.45
pcre2	10.37

Library	Version
perl	5.32.1
pexpect	4.8.0
pickle5	0.0.12
pickleshare	0.7.5
pillow	8.4.0
pip	21.3.1
pixman	0.40.0
pooch	1.5.2
poppler	21.09.0
poppler-data	0.4.11
postgresql	13.5
proj	8.1.0
prometheus_client	0.12.0
prompt-toolkit	3.0.24
protobuf	3.18.1
psutil	5.8.0
pthread-stubs	0.4
ptxcompiler	0.2.0
ptyprocess	0.7.0
py-xgboost	1.5.0dev.rapidsai21.12
py4j	0.10.9
pyarrow	5.0.0
pycparser	2.21
pyct	0.4.6
pyct-core	0.4.6
pydeck	0.5.0
pyee	8.1.0
pygments	2.10.0
pynvml	11.4.1
pyopenssl	21.0.0
pyparsing	3.0.6
pypeteer	0.2.6
pyproj	3.1.0
pyrsistent	0.18.0
pysocks	1.7.1
python	3.7.12
python-confluent-kafka	1.6.0
python-dateutil	2.8.2
python_abi	3.7

Library	Version
pytz	2021.3
pyviz_comms	2.1.0
pywavelets	1.2.0
pyyaml	6.0
pyzmq	22.3.0
rapids	21.12.00
rapids-xgboost	21.12.00
re2	2021.11.01
readline	8.1
requests	2.26.0
rmm	21.12.00
rtree	0.9.7
s2n	1.3.0
scikit-image	0.18.1
scikit-learn	1.0.1
scipy	1.7.3
send2trash	1.8.0
setuptools	59.6.0
shapely	1.8.0
simpervisor	0.4
six	1.16.0
snappy	1.1.8
sniffio	1.2.0
sortedcontainers	2.4.0
spdlog	1.8.5
sqlite	3.37.0
streamz	0.6.3
tblib	1.7.0
terminado	0.12.1
testpath	0.5.0
threadpoolctl	3.0.0
tifffile	2021.11.2
tiledb	2.3.4
tk	8.6.11
toolz	0.11.2
tornado	6.1
tqdm	4.62.3
traitlets	5.1.1
treelite	2.1.0

Library	Version
treelite-runtime	2.1.0
typing-extensions	4.0.1
typing_extensions	4.0.1
tzcode	2021e
tzdata	2021e
ucx	1.11.2+gef2bbcf
ucx-proc	1.0.0
ucx-py	0.23.0
unicodedata2	13.0.0.post2
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.3
websockets	9.1
wheel	0.37.0
widgetsnextension	3.5.2
xarray	0.20.2
xerces-c	3.2.3
xgboost	1.5.0dev.rapidsai21.12
xorg-kbproto	1.0.7
xorg-libice	1.0.10
xorg-libsm	1.2.3
xorg-libx11	1.7.2
xorg-libxau	1.0.9
xorg-libxdmcp	1.1.3
xorg-libxext	1.3.4
xorg-libxrender	0.9.10
xorg-renderproto	0.11.1
xorg-xextproto	7.3.0
xorg-xproto	7.0.31
xz	5.2.5
yaml	0.2.5
yaml	1.7.2
zeromq	4.3.4
zfp	0.5.5
zict	2.0.0
zipp	3.6.0
zlib	1.2.11
zstd	1.5.0

Scala 2.11 Libraries for Workbench

This section lists the packages in Scala 2.11.12 Workbench Runtimes that ship with ML Runtimes 2021.12.

Scala 2.11.12 Libraries for Workbench - Standard

Library	Version
org.scala-lang:scala-library	2.11.12
org.scalatest:scalatest	2.2.4
org.scala-lang:scala-compiler	2.11.12
io.circe:circe-generic	0.11.2
io.circe:circe-parser	0.11.2
org.scalameta:scalameta	1.0.0

Python 3.9.6 Libraries for JupyterLab

This section lists the packages in Python 3.9 JupyterLab Runtimes that ship with ML Runtimes 2021.12.

Table 169: Packages in Python 3.9.6 JupyterLab Runtimes - Standard

Library	Version
python	3.9.6
pip	21.1.3
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0

Library	Version
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1

Library	Version
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1

Table 170: Packages in Python 3.9.6 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.9.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3

Library	Version
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20

Library	Version
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1

Python 3.8 Libraries for JupyterLab

This section lists the packages in Python 3.8 JupyterLab Runtimes that ship with ML Runtimes 2021.012.

Table 171: Packages in Python 3.8.6 JupyterLab Runtimes - Standard

Library	Version
python	3.8.6
pip	21.1.3
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4

Library	Version
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0

Library	Version
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1

Table 172: Packages in Python 3.8.6 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.8.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1

Library	Version
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9

Library	Version
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1

Table 173: Packages in Python 3.8.6 JupyterLab Runtimes - RAPIDS

Library	Version
python	3.8.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1

Library	Version
_libgcc_mutex	0.1
_openmp_mutex	4.5
abseil-cpp	20210324.2
aiohttp	3.8.1
aiosignal	1.2.0
anyio	3.3.0
appdirs	1.4.4
argon2-cffi	20.1.0
arrow-cpp	5.0.0
arrow-cpp-proc	3.0.0
async-timeout	4.0.1
async_generator	1.10
attrs	20.3.0
aws-c-auth	0.6.7
aws-c-cal	0.5.12
aws-c-common	0.6.17
aws-c-compression	0.2.14
aws-c-event-stream	0.2.7
aws-c-http	0.6.10
aws-c-io	0.10.13
aws-c-mqtt	0.7.9
aws-c-s3	0.1.27
aws-c-sdkutils	0.1.1
aws-checksums	0.1.12
aws-crt-cpp	0.17.8
aws-sdk-cpp	1.9.145
babel	2.9.1
backcall	0.2.0
backports	1.0
backports.functools_lru_cache	1.6.4
bleach	3.3.1
blosc	1.21.0
bokeh	2.4.0
boost	1.74.0
boost-cpp	1.74.0
brotli	1.0.9
brotli-bin	1.0.9
brotlipy	0.7.0
brunsli	0.1

Library	Version
bzip2	1.0.8
c-ares	1.18.1
c-blosc2	2.0.4
ca-certificates	2021.10.8
cachetools	4.2.4
cairo	1.16.0
cdsw	1.1.0
certifi	2020.11.8
cffi	1.14.4
cfitsio	3.470
chardet	4.0.0
charls	2.2.0
charset-normalizer	2.0.6
click	8.0.3
click-plugins	1.1.1
cligj	0.7.2
cloudpickle	2.0.0
colorama	0.4.4
colorcet	3.0.0
cryptography	36.0.1
cucim	21.12.00
cuda-toolkit	11.0.221
cudf	21.12.02
cudf_kafka	21.12.02
cudnn	8.2.1.32
cugraph	21.12.00
cuml	21.12.00
cupy	9.6.0
curl	7.80.0
cusignal	21.12.00
cuspatial	21.12.00
custreamz	21.12.02
cuxfilter	21.12.00
cycler	0.11.0
cyrus-sasl	2.1.27
cytoolz	0.11.2
dask	2021.11.2
dask-core	2021.11.2
dask-cuda	21.12.00

Library	Version
dask-cudf	21.12.02
datashader	0.11.1
datashape	0.5.4
debugpy	1.5.1
decorator	4.4.2
defusedxml	0.6.0
distributed	2021.11.2
dlpack	0.5
entrypoints	0.3
expat	2.4.1
faiss-proc	1.0.0
fastavro	1.4.7
fastrlock	0.8
fiona	1.8.20
font-ttf-dejavu-sans-mono	2.37
font-ttf-inconsolata	3.000
font-ttf-source-code-pro	2.038
font-ttf-ubuntu	0.83
fontconfig	2.13.1
fonts-conda-ecosystem	1
fonts-conda-forge	1
fonttools	4.28.4
freetype	2.10.4
freexl	1.0.6
frozenlist	1.2.0
fsspec	2021.11.1
gdal	3.3.2
geopandas	0.9.0
geopandas-base	0.9.0
geos	3.9.1
geotiff	1.7.0
gettext	0.19.8.1
gflags	2.2.2
giflib	5.2.1
git	2.34.1
glog	0.5.0
gpuci-tools	0.3.1
grpc-cpp	1.41.1
hdf4	4.2.15

Library	Version
hdf5	1.12.1
heapdict	1.0.1
icu	68.2
idna	2.10
imagecodecs	2021.8.26
imageio	2.13.3
importlib-metadata	4.8.3
importlib_metadata	4.8.3
importlib_resources	5.4.0
ipykernel	5.3.4
ipython	7.16.1
ipython_genutils	0.2.0
ipywidgets	7.6.5
jbig	2.1
jedi	0.17.2
jinja2	2.11.3
joblib	1.1.0
jpeg	9d
json-c	0.15
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyter-server-proxy	3.2.0
jupyterlab	3.2.8
jupyterlab-server	2.7.2
jupyterlab_pygments	0.1.2
jupyterlab_widgets	1.0.2
jxrllib	1.1
kealib	1.4.14
kiwisolver	1.3.2
krb5	1.19.2
lcms2	2.12
ld_impl_linux-64	2.36.1
lerc	3.0
libaec	1.0.6
libblas	3.9.0
libbrotlicommon	1.0.9

Library	Version
libbrotlidec	1.0.9
libbrotlienc	1.0.9
libcblas	3.9.0
libcucim	21.12.00
libcudf	21.12.02
libcudf_kafka	21.12.02
libcugraph	21.12.00
libcuml	21.12.00
libcumlprims	21.12.00
libcurl	7.80.0
libcusolver	11.3.2.107
libcuspatial	21.12.00
libdap4	3.20.6
libdeflate	1.8
libedit	3.1.20191231
libev	4.33
libevent	2.1.10
libfaiss	1.7.0
libffi	3.4.2
libgcc-ng	9.4.0
libgcrypt	1.9.4
libgdal	3.3.2
libgfortran-ng	11.2.0
libgfortran5	11.2.0
libglib	2.70.2
libgpg-error	1.42
libgsasl	1.10.0
libhwloc	2.3.0
libiconv	1.16
libkml	1.3.0
liblapack	3.9.0
libllvm11	11.1.0
libnetcdf	4.8.1
libnghttp2	1.43.0
libns1	2.0.0
libntlm	1.4
libopenblas	0.3.18
libpng	1.6.37
libpq	13.5

Library	Version
libprotobuf	3.18.1
librdkafka	1.6.1
librmm	21.12.00
librttopo	1.1.0
libsodium	1.0.18
libspatialindex	1.9.3
libspatialite	5.0.1
libssh2	1.10.0
libstdcxx-ng	9.4.0
libthrift	0.15.0
libtiff	4.3.0
libutf8proc	2.7.0
libuuid	2.32.1
libuv	1.42.0
libwebp	1.2.1
libwebp-base	1.2.1
libxcb	1.13
libxgboost	1.5.0dev.rapidsai21.12
libxml2	2.9.12
libzip	1.8.0
libzlib	1.2.11
libzopfli	1.0.3
llvm-openmp	12.0.1
llvmlite	0.37.0
loket	0.2.0
lz4-c	1.9.3
mapclassify	2.4.3
markdown	3.3.6
markupsafe	1.1.1
matplotlib-base	3.5.1
matplotlib-inline	0.1.3
mistune	0.8.4
msgpack-python	1.0.3
multidict	5.2.0
multipledispatch	0.6.0
munch	2.5.0
munkres	1.1.4
nbclassic	0.3.1
nbclient	0.5.1

Library	Version
nbconvert	6.0.7
nbformat	5.1.3
nccl	2.11.4.1
ncurses	6.2
nest-asyncio	1.5.1
networkx	2.6.3
nodejs	14.17.4
notebook	6.4.3
nspr	4.32
nss	3.73
numba	0.54.1
numpy	1.20.3
nvtx	0.2.3
olefile	0.46
openjpeg	2.4.0
openssl	1.1.11
orc	1.7.1
packaging	20.9
pandas	1.3.5
pandoc	2.16.2
pandocfilters	1.4.3
panel	0.12.4
param	1.12.0
parquet-cpp	1.5.1
parso	0.7.1
partd	1.2.0
pcre	8.45
pcre2	10.37
perl	5.32.1
pexpect	4.8.0
pickleshare	0.7.5
pillow	8.4.0
pip	21.3.1
pixman	0.40.0
pooch	1.5.2
poppler	21.09.0
poppler-data	0.4.11
postgresql	13.5
proj	8.1.0

Library	Version
prometheus-client	0.9.0
prompt-toolkit	3.0.8
protobuf	3.18.1
psutil	5.8.0
pthread-stubs	0.4
ptxcompiler	0.2.0
ptyprocess	0.6.0
py-xgboost	1.5.0dev.rapidsai21.12
py4j	0.10.9
pyarrow	5.0.0
pycparser	2.20
pyct	0.4.6
pyct-core	0.4.6
pydeck	0.5.0
pyee	8.1.0
pygments	2.8.1
pynvml	11.4.1
pyopenssl	21.0.0
yparsing	2.4.7
pypeteer	0.2.6
pyproj	3.1.0
pyrsistent	0.17.3
pysocks	1.7.1
python	3.8.12
python-confluent-kafka	1.6.0
python-dateutil	2.8.1
python_abi	3.8
pytz	2021.1
pyviz_comms	2.1.0
pywavelets	1.2.0
pyyaml	6.0
pyzmq	19.0.2
rapids	21.12.00
rapids-xgboost	21.12.00
re2	2021.11.01
readline	8.1
requests	2.25.1
requests-unixsocket	0.2.0
rmm	21.12.00

Library	Version
rtree	0.9.7
s2n	1.3.0
scikit-image	0.18.1
scikit-learn	1.0.1
scipy	1.7.3
send2trash	1.5.0
setuptools	59.6.0
shapely	1.8.0
simpervisor	0.4
six	1.15.0
snappy	1.1.8
sniffio	1.2.0
sortedcontainers	2.4.0
spdlog	1.8.5
sqlite	3.37.0
streamz	0.6.3
tblib	1.7.0
terminado	0.9.2
testpath	0.4.4
threadpoolctl	3.0.0
tiffio	2021.11.2
tiledb	2.3.4
tk	8.6.11
toolz	0.11.2
tornado	6.1
tqdm	4.62.3
traitlets	4.3.3
treelite	2.1.0
treelite-runtime	2.1.0
typing-extensions	4.0.1
typing_extensions	4.0.1
tzcode	2021e
tzdata	2021e
ucx	1.11.2+gef2bbcf
ucx-proc	1.0.0
ucx-py	0.23.0
unicodedata2	13.0.0.post2
urllib3	1.26.6
wcwidth	0.2.5

Library	Version
webencodings	0.5.1
websocket-client	1.2.1
websockets	9.1
wheel	0.37.0
widetsnbextension	3.5.2
xarray	0.20.2
xerces-c	3.2.3
xgboost	1.5.0dev.rapidsai21.12
xorg-kbproto	1.0.7
xorg-libice	1.0.10
xorg-libsm	1.2.3
xorg-libx11	1.7.2
xorg-libxau	1.0.9
xorg-libxdmcp	1.1.3
xorg-libxext	1.3.4
xorg-libxrender	0.9.10
xorg-renderproto	0.11.1
xorg-xextproto	7.3.0
xorg-xproto	7.0.31
xz	5.2.5
yaml	0.2.5
yaml	1.7.2
zeromq	4.3.4
zfp	0.5.5
zict	2.0.0
zipp	3.6.0
zlib	1.2.11
zstd	1.5.0

Python 3.7 Libraries for JupyterLab

This section lists the packages in Python 3.7 JupyterLab Runtimes that ship with ML Runtimes 2021.12.

Table 174: Packages in Python 3.7.11 JupyterLab Runtimes - Standard

Library	Version
python	3.7.11
pip	21.1.3
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10

Library	Version
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cfffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
importlib-metadata	3.4.0
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1

Library	Version
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.4.0

Table 175: Packages in Python 3.7.11 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.7.11
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.1
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
charset-normalizer	2.0.6
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
importlib-metadata	3.4.0
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.2.8
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1

Library	Version
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.4.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3

Library	Version
typing-extensions	3.7.4.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.4.0

Table 176: Packages in Python 3.7.11 JupyterLab Runtimes - RAPIDS

Library	Version
python	3.7.11
pip	21.1.3
_libgcc_mutex	0.1
_openmp_mutex	4.5
abseil-cpp	20210324.2
aiohttp	3.8.1
aiosignal	1.2.0
anyio	3.3.0
appdirs	1.4.4
argcomplete	1.12.3
argon2-cffi	20.1.0
arrow-cpp	5.0.0
arrow-cpp-proc	3.0.0
async-timeout	4.0.1
async_generator	1.10
asynctest	0.13.0
attrs	20.3.0
aws-c-auth	0.6.7
aws-c-cal	0.5.12
aws-c-common	0.6.17
aws-c-compression	0.2.14
aws-c-event-stream	0.2.7
aws-c-http	0.6.10
aws-c-io	0.10.13
aws-c-mqtt	0.7.9
aws-c-s3	0.1.27
aws-c-sdkutils	0.1.1
aws-checksums	0.1.12
aws-crt-cpp	0.17.8
aws-sdk-cpp	1.9.145

Library	Version
babel	2.9.1
backcall	0.2.0
backports	1.0
backports.functools_lru_cache	1.6.4
bleach	3.3.1
blosc	1.21.0
bokeh	2.4.0
boost	1.74.0
boost-cpp	1.74.0
brotli	1.0.9
brotli-bin	1.0.9
brotlipy	0.7.0
brunsli	0.1
bzip2	1.0.8
c-ares	1.18.1
c-blosc2	2.0.4
ca-certificates	2021.10.8
cachetools	4.2.4
cairo	1.16.0
cdsw	1.1.0
certifi	2020.11.8
cffi	1.14.4
cfitsio	3.470
chardet	4.0.0
charls	2.2.0
charset-normalizer	2.0.6
click	8.0.3
click-plugins	1.1.1
cligj	0.7.2
cloudpickle	2.0.0
colorama	0.4.4
colorcet	3.0.0
cryptography	36.0.1
cucim	21.12.00
cuda-toolkit	11.0.221
cudf	21.12.02
cudf_kafka	21.12.02
cudnn	8.2.1.32
cugraph	21.12.00

Library	Version
cuml	21.12.00
cupy	9.6.0
curl	7.80.0
cusignal	21.12.00
cuspatial	21.12.00
custreamz	21.12.02
cuxfilter	21.12.00
cycler	0.11.0
cyrus-sasl	2.1.27
cytoolz	0.11.2
dask	2021.11.2
dask-core	2021.11.2
dask-cuda	21.12.00
dask-cudf	21.12.02
datashader	0.11.1
datashape	0.5.4
debugpy	1.5.1
decorator	4.4.2
defusedxml	0.6.0
distributed	2021.11.2
dlpack	0.5
entrypoints	0.3
expat	2.4.1
faiss-proc	1.0.0
fastavro	1.4.7
fastrlock	0.8
fiona	1.8.20
font-ttf-dejavu-sans-mono	2.37
font-ttf-inconsolata	3.000
font-ttf-source-code-pro	2.038
font-ttf-ubuntu	0.83
fontconfig	2.13.1
fonts-conda-ecosystem	1
fonts-conda-forge	1
fonttools	4.28.4
freetype	2.10.4
freexl	1.0.6
frozenset	1.2.0
fsspec	2021.11.1

Library	Version
gdal	3.3.2
geopandas	0.9.0
geopandas-base	0.9.0
geos	3.9.1
geotiff	1.7.0
gettext	0.19.8.1
gflags	2.2.2
giflib	5.2.1
git	2.34.1
glog	0.5.0
gpuci-tools	0.3.1
grpc-cpp	1.41.1
hdf4	4.2.15
hdf5	1.12.1
heapdict	1.0.1
icu	68.2
idna	2.10
imagecodecs	2021.8.26
imageio	2.13.3
importlib-metadata	3.4.0
importlib_metadata	4.8.3
importlib_resources	5.4.0
ipykernel	5.3.4
ipython	7.16.1
ipython_genutils	0.2.0
ipywidgets	7.6.5
jbig	2.1
jedi	0.17.2
jinja2	2.11.3
joblib	1.1.0
jpeg	9d
json-c	0.15
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyter-server-proxy	3.2.0
jupyterlab	3.2.8

Library	Version
jupyterlab-server	2.7.2
jupyterlab_pygments	0.1.2
jupyterlab_widgets	1.0.2
jxrllib	1.1
kealib	1.4.14
kiwisolver	1.3.2
krb5	1.19.2
lcms2	2.12
ld_impl_linux-64	2.36.1
lerc	3.0
libaec	1.0.6
libblas	3.9.0
libbrotlicommon	1.0.9
libbrotlidec	1.0.9
libbrotlienc	1.0.9
libcblas	3.9.0
libcucim	21.12.00
libcudf	21.12.02
libcudf_kafka	21.12.02
libcugraph	21.12.00
libcuml	21.12.00
libcumlprims	21.12.00
libcurl	7.80.0
libcusolver	11.3.2.107
libcuspatial	21.12.00
libdap4	3.20.6
libdeflate	1.8
libedit	3.1.20191231
libev	4.33
libevent	2.1.10
libfaiss	1.7.0
libffi	3.4.2
libgcc-ng	9.4.0
libgcrypt	1.9.4
libgdal	3.3.2
libgfortran-ng	11.2.0
libgfortran5	11.2.0
libglib	2.70.2
libgpg-error	1.42

Library	Version
libgsasl	1.10.0
libhwloc	2.3.0
libiconv	1.16
libkml	1.3.0
liblapack	3.9.0
libllvm11	11.1.0
libnetcdf	4.8.1
libnghttp2	1.43.0
libnsl	2.0.0
libntlm	1.4
libopenblas	0.3.18
libpng	1.6.37
libpq	13.5
libprotobuf	3.18.1
librdkafka	1.6.1
librmm	21.12.00
librttopo	1.1.0
libsodium	1.0.18
libspatialindex	1.9.3
libspatialite	5.0.1
libssh2	1.10.0
libstdcxx-ng	9.4.0
libthrift	0.15.0
libtiff	4.3.0
libutf8proc	2.7.0
libuuid	2.32.1
libuv	1.42.0
libwebp	1.2.1
libwebp-base	1.2.1
libxcb	1.13
libxgboost	1.5.0dev.rapidsai21.12
libxml2	2.9.12
libzip	1.8.0
libzlib	1.2.11
libzopfli	1.0.3
llvm-openmp	12.0.1
llvmlite	0.37.0
loket	0.2.0
lz4-c	1.9.3

Library	Version
mapclassify	2.4.3
markdown	3.3.6
markupsafe	1.1.1
matplotlib-base	3.5.1
matplotlib-inline	0.1.3
mistune	0.8.4
msgpack-python	1.0.3
multidict	5.2.0
multipledispatch	0.6.0
munch	2.5.0
munkres	1.1.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nccl	2.11.4.1
ncurses	6.2
nest-asyncio	1.5.1
networkx	2.6.3
nodejs	14.17.4
notebook	6.4.3
nspr	4.32
nss	3.73
numba	0.54.1
numpy	1.20.3
nvtx	0.2.3
olefile	0.46
openjpeg	2.4.0
openssl	1.1.11
orc	1.7.1
packaging	20.9
pandas	1.3.5
pandoc	2.16.2
pandocfilters	1.4.3
panel	0.12.4
param	1.12.0
parquet-cpp	1.5.1
parso	0.7.1
partd	1.2.0

Library	Version
pcre	8.45
pcre2	10.37
perl	5.32.1
pexpect	4.8.0
pickle5	0.0.12
pickleshare	0.7.5
pillow	8.4.0
pip	21.3.1
pixman	0.40.0
pooch	1.5.2
poppler	21.09.0
poppler-data	0.4.11
postgresql	13.5
proj	8.1.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
protobuf	3.18.1
psutil	5.8.0
pthread-stubs	0.4
ptxcompiler	0.2.0
ptyprocess	0.6.0
py-xgboost	1.5.0dev.rapidsai21.12
py4j	0.10.9
pyarrow	5.0.0
pycparser	2.20
pyct	0.4.6
pyct-core	0.4.6
pydeck	0.5.0
pyee	8.1.0
pygments	2.8.1
pynvml	11.4.1
pyopenssl	21.0.0
pyparsing	2.4.7
pyppeteer	0.2.6
pyproj	3.1.0
pyrsistent	0.17.3
pysocks	1.7.1
python	3.7.12
python-confluent-kafka	1.6.0

Library	Version
python-dateutil	2.8.1
python_abi	3.7
pytz	2021.1
pyviz_comms	2.1.0
pywavelets	1.2.0
pyyaml	6.0
pyzmq	19.0.2
rapids	21.12.00
rapids-xgboost	21.12.00
re2	2021.11.01
readline	8.1
requests	2.25.1
requests-unixsocket	0.2.0
rmm	21.12.00
rtree	0.9.7
s2n	1.3.0
scikit-image	0.18.1
scikit-learn	1.0.1
scipy	1.7.3
send2trash	1.5.0
setuptools	59.6.0
shapely	1.8.0
simpervisor	0.4
six	1.15.0
snappy	1.1.8
sniffio	1.2.0
sortedcontainers	2.4.0
spdlog	1.8.5
sqlite	3.37.0
streamz	0.6.3
tblib	1.7.0
terminado	0.9.2
testpath	0.4.4
threadpoolctl	3.0.0
tifffile	2021.11.2
tiledb	2.3.4
tk	8.6.11
toolz	0.11.2
tornado	6.1

Library	Version
tqdm	4.62.3
traitlets	4.3.3
treelite	2.1.0
treelite-runtime	2.1.0
typing-extensions	3.7.4.3
tzcode	2021e
tzdata	2021e
ucx	1.11.2+gef2bbcf
ucx-proc	1.0.0
ucx-py	0.23.0
unicodedata2	13.0.0.post2
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
websockets	9.1
wheel	0.37.0
widgetsnbextension	3.5.2
xarray	0.20.2
xerces-c	3.2.3
xgboost	1.5.0dev.rapidsai21.12
xorg-kbproto	1.0.7
xorg-libice	1.0.10
xorg-libsm	1.2.3
xorg-libx11	1.7.2
xorg-libxau	1.0.9
xorg-libxdmcp	1.1.3
xorg-libxext	1.3.4
xorg-libxrender	0.9.10
xorg-renderproto	0.11.1
xorg-xextproto	7.3.0
xorg-xproto	7.0.31
xz	5.2.5
yaml	0.2.5
yaml	1.7.2
zeromq	4.3.4
zfp	0.5.5
zict	2.0.0
zipp	3.4.0

Library	Version
zlib	1.2.11
zstd	1.5.0

R 4.0 Libraries

This section lists the R 4.0 libraries that ship with ML Runtimes 2021.12.

Table 177: R 4.0.5 Libraries for Workbench

Library	Version
askpass	1.1
base	4.0.5
bitops	1.0-7
boot	1.3-27
brew	1.0-6
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-18
cli	3.0.1
cluster	2.1.1
codetools	0.2-18
colorspace	2.0-2
compiler	4.0.5
crayon	1.4.1
curl	4.3.2
datasets	4.0.5
digest	0.6.27
ellipsis	0.3.2
fansi	0.5.0
farver	2.1.0
foreign	0.8-81
ggplot2	3.3.5
glue	1.4.2
graphics	4.0.5
grDevices	4.0.5
grid	4.0.5
gtable	0.3.0
httr	1.4.2
jsonlite	1.7.2
KernSmooth	2.23-18

Library	Version
labeling	0.4.2
lattice	0.20-41
lifecycle	1.0.0
magrittr	2.0.1
MASS	7.3-53.1
Matrix	1.3-2
methods	4.0.5
mgcv	1.8-34
mime	0.11
munsell	0.5.0
nlme	3.1-152
nnet	7.3-15
openssl	1.4.4
parallel	4.0.5
pillar	1.6.2
pkgconfig	2.0.3
png	0.1-7
R6	2.5.1
RColorBrewer	1.1-2
RJSONIO	1.3-1.5
rlang	0.4.11
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.1
spatial	7.3-13
splines	4.0.5
stats	4.0.5
stats4	4.0.5
survival	3.2-10
sys	3.4
tcltk	4.0.5
tibble	3.1.4
tools	4.0.5
utf8	1.2.2
utils	4.0.5
vctrs	0.3.8
viridisLite	0.4.0
withr	2.4.2

R 4.1 Libraries

This section lists the R 4.1 libraries that ship with ML Runtimes 2021.12.

Table 178: R 4.0.5 Libraries for Workbench

Library	Version
askpass	1.1
base	4.1.1
bitops	1.0-7
boot	1.3-28
brew	1.0-6
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-19
cli	3.0.1
cluster	2.1.2
codetools	0.2-18
colorspace	2.0-2
compiler	4.1.1
crayon	1.3.4
curl	4.3.2
datasets	4.1.1
digest	0.6.27
ellipsis	0.3.2
fansi	0.5.0
farver	2.1.0
foreign	0.8-81
ggplot2	3.3.5
glue	1.4.2
graphics	4.1.1
grDevices	4.1.1
grid	4.1.1
gtable	0.3.0
httr	1.4.2
jsonlite	1.7.2
KernSmooth	2.23-20
labeling	0.4.2
lattice	0.20-44
lifecycle	1.0.0
magrittr	2.0.1

Library	Version
MASS	7.3-54
Matrix	1.3-4
methods	4.1.1
mgcv	1.8-36
mime	0.11
munsell	0.5.0
nlme	3.1-152
nnet	7.3-16
openssl	1.4.4
parallel	4.1.1
pillar	1.6.2
pkgconfig	2.0.3
png	0.1-7
R6	2.5.1
RColorBrewer	1.1-2
RJSONIO	1.3-1.5
rlang	0.4.11
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.1
spatial	7.3-14
splines	4.1.1
stats	4.1.1
stats4	4.1.1
survival	3.2-11
sys	3.4
tcltk	4.1.1
tibble	3.1.4
tools	4.1.1
utf8	1.2.2
utils	4.1.1
vctrs	0.3.8
viridisLite	0.4.0
withr	2.4.2

R 3.6 Libraries

This section lists the R 3.6 libraries that ship with ML Runtimes 2021.12.

Table 179: R 3.6.3 Libraries for Workbench

Library	Version
askpass	1.1
base	3.6.3
bitops	1.0-7
boot	1.3-24
brew	1.0-6
Cairo	1.2-0
caTools	1.18.2
cdsw	2.1
class	7.3-15
cli	3.0.1
cluster	2.1.0
codetools	0.2-16
colorspace	2.0-2
compiler	3.6.3
crayon	1.4.4
curl	4.3.2
datasets	3.6.3
digest	0.6.27
ellipsis	0.3.2
fansi	0.5.0
farver	2.1.0
foreign	0.8-75
ggplot2	3.3.5
glue	1.4.2
graphics	3.6.3
grDevices	3.6.3
grid	3.6.3
gtable	0.3.0
httr	1.4.2
jsonlite	1.7.2
KernSmooth	2.23-16
labeling	0.4.2
lattice	0.20-38
lifecycle	0.1.0
magrittr	2.0.1
MASS	7.3-51.5
Matrix	1.2-18

Library	Version
methods	3.6.3
mgcv	1.8-31
mime	0.11
munsell	0.5.0
nlme	3.4-144
nnet	7.3-12
openssl	1.4.4
parallel	3.6.3
pillar	1.6.2
pkgconfig	2.0.3
png	0.1-7
R6	2.5.1
RColorBrewer	1.1-2
RJSONIO	1.3-1.5
rlang	0.4.11
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.1
spatial	7.3-11
splines	3.6.3
stats	3.6.3
stats4	3.6.3
survival	3.1-8
sys	3.4
tktk	3.6.3
tibble	3.1.4
tools	3.6.3
utf8	1.2.2
utils	3.6.3
vctrs	0.3.8
viridisLite	0.4.0
withr	2.4.2

ML Runtimes 2021.09

This section lists the Python, R, and Scala libraries that ship with ML Runtimes 2021.09.



Note: Nvidia GPU Edition comes with CUDA 11.4.1 preinstalled.

Python 3.9 Libraries for Workbench

This section lists the packages in Python 3.9 Workbench Runtimes that ship with ML Runtimes 2021.09.

Table 180: Packages in Python 3.9.6 Workbench Runtimes - Standard

Library	Version
python	3.9.6
pip	21.1.3
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0

Library	Version
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Table 181: Packages in Python 3.9.6 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.9.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1

Library	Version
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Python 3.8 Libraries for Workbench

This section lists the packages in Python 3.8 Workbench Runtimes that ship with ML Runtimes 2021.09.

Table 182: Packages in Python 3.8.6 Workbench Runtimes - Standard

Library	Version
python	3.8.6
pip	21.1.3
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0

Library	Version
pickleshare	0.7.5
Pillow	8.3.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Table 183: Packages in Python 3.8.6 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.8.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3

Library	Version
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Python 3.7 Libraries for Workbench

This section lists the packages in Python 3.7 Workbench Runtimes that ship with ML Runtimes 2021.09.

Table 184: Packages in Python 3.7.11 Workbench Runtimes - Standard

Library	Version
python	3.7.11
pip	21.1.3
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10

Library	Version
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Table 185: Packages in Python 3.7.11 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.7.11
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
backcall	0.2.0

Library	Version
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Python 3.6 Libraries for Workbench

This section lists the packages in Python 3.6 Workbench Runtimes that ship with ML Runtimes 2021.09.

Table 186: Packages in Python 3.6.14 Workbench Runtimes - Standard

Library	Version
python	3.6.14
pip	21.1.3
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1

Library	Version
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Table 187: Packages in Python 3.6.14 Workbench Runtimes - Nvidia GPU Edition

Library	Version
python	3.6.14
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kerberos	1.3.1
kiwisolver	1.3.1
matplotlib	3.3.4
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1

Library	Version
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5

Scala 2.11 Libraries for Workbench

This section lists the packages in Scala 2.11.12 Workbench Runtimes that ship with ML Runtimes 2021.09.

Scala 2.11.12 Libraries for Workbench - Standard

- org.scala-lang:scala-library:2.11.12
- org.scalatest:scalatest:2.2.4:test
- org.scala-lang:scala-reflect:2.11.12
- org.scala-lang:scala-compiler:2.11.12
- io.circe:circe-generic:0.11.2
- io.circe:circe-parser:0.11.2
- org.scalameta:scalameta:1.0.0

Python 3.9.6 Libraries for JupyterLab

This section lists the packages in Python 3.9 JupyterLab Runtimes that ship with ML Runtimes 2021.09.

Table 188: Packages in Python 3.9.6 JupyterLab Runtimes - Standard

Library	Version
python	3.9.6
pip	21.1.3
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0

Library	Version
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.0.17
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0

Library	Version
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1

Table 189: Packages in Python 3.9.6 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.9.6
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1

Library	Version
certifi	2020.11.8
cff	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.0.17
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5

Library	Version
Pillow	8.3.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1

Python 3.8 Libraries for JupyterLab

This section lists the packages in Python 3.8 JupyterLab Runtimes that ship with ML Runtimes 2021.09.

Table 190: Packages in Python 3.8.6 JupyterLab Runtimes - Standard

Library	Version
python	3.8.6
pip	21.1.3
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10

Library	Version
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cfffi	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.0.17
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4

Library	Version
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1

Table 191: Packages in Python 3.8.6 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.8.6
pip	21.1.3
cuda	11.4.1-1

Library	Version
libcudnn8	8.2.2.26-1
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.0.17
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7

Library	Version
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1

Python 3.7 Libraries for JupyterLab

This section lists the packages in Python 3.7 JupyterLab Runtimes that ship with ML Runtimes 2021.09.

Table 192: Packages in Python 3.7.11 JupyterLab Runtimes - Standard

Library	Version
python	3.7.11
pip	21.1.3
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
importlib-metadata	3.4.0
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.0.17
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4

Library	Version
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.6

Library	Version
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.4.0

Table 193: Packages in Python 3.7.11 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.7.11
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
importlib-metadata	3.4.0
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2

Library	Version
jupyterlab	3.0.17
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2

Library	Version
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.4.0

Python 3.6 Libraries for JupyterLab

This section lists the packages in Python 3.6 JupyterLab Runtimes that ship with ML Runtimes 2021.09.

Table 194: Packages in Python 3.6.14 JupyterLab Runtimes - Standard

Library	Version
python	3.6.14
pip	21.1.3
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
contextvars	2.4
cycler	0.10.0
dataclasses	0.8
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
immutables	0.14
importlib-metadata	3.4.0

Library	Version
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.0.17
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pyparser	2.20
Pygments	2.8.1

Library	Version
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.4.0

Table 195: Packages in Python 3.6.14 JupyterLab Runtimes - Nvidia GPU Edition

Library	Version
python	3.6.14
pip	21.1.3
cuda	11.4.1-1
libcudnn8	8.2.2.26-1
anyio	3.3.0
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.1
certifi	2020.11.8
cffi	1.14.4

Library	Version
chardet	4.0.0
contextvars	2.4
cycler	0.10.0
dataclasses	0.8
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
immutables	0.14
importlib-metadata	3.4.0
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.10.2
jupyterlab	3.0.17
jupyterlab-pygments	0.1.2
jupyterlab-server	2.7.2
kerberos	1.3.1
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.4
mistune	0.8.4
nbclassic	0.3.1
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.3
nest-asyncio	1.5.1
notebook	6.4.3
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1

Library	Version
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.3.1
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
requests-unixsocket	0.2.0
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.6
wcwidth	0.2.5
webencodings	0.5.1
websocket-client	1.2.1
zipp	3.4.0

R 4.0 Libraries

This section lists the R 4.0 libraries that ship with ML Runtimes 2021.09.

Table 196: R 4.0.5 Libraries for Workbench

Library	Version
askpass	1.1

Library	Version
assertthat	0.2.1
base	4.0.5
bitops	1.0-6
boot	1.3-27
brew	1.0-6
Cairo	1.2-0
caTools	1.18.0
cdsw	2.1
class	7.3-18
cli	2.0.1
cluster	2.1.1
codetools	0.2-18
colorspace	1.4-1
compiler	4.0.5
crayon	1.3.4
curl	4.3
datasets	4.0.5
digest	0.6.23
ellipsis	0.3.0
fansi	0.4.1
farver	2.0.3
foreigns	0.8-81
ggplot2	3.2.1
glue	1.3.1
graphics	4.0.5
grDevices	4.0.5
grid	4.0.5
gtable	0.3.0
httr	1.4.1
jsonlite	1.6
KernSmooth	2.23-18
labeling	0.3
lattice	0.20-41
lazyeval	0.2.2
lifecycle	0.1.0
magrittr	1.5
MASS	7.3-53.1
Matrix	1.3-2
methods	4.0.5

Library	Version
mgcv	1.8-34
mime	0.8
munsell	0.5.0
nlme	3.1-152
nnet	7.3-15
openssl	1.4.1
parallel	4.0.5
pillar	1.4.3
pkgconfig	2.0.3
plyr	1.8.5
png	0.1-7
R6	2.4.1
RColorBrewer	1.1-2
Rcpp	1.0.3
reshape2	1.4.3
RJSONIO	1.3-1.4
rlang	0.4.4
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.0
spatial	7.3-13
splines	4.0.5
stats	4.0.5
stats4	4.0.5
stringi	1.4.5
stringr	1.4.0
survival	3.2-10
sys	3.3
tktk	4.0.5
tibble	2.1.3
tools	4.0.5
utf8	1.1.4
utils	4.0.5
vctrs	0.2.2
viridisLite	0.3.0
withr	2.1.2

R 3.6 Libraries

This section lists the R 3.6 libraries that ship with ML Runtimes 2021.09.

Table 197: R 3.6.3 Libraries for Workbench

Library	Version
askpass	1.1
assertthat	0.2.1
base	3.6.3
bitops	1.0-6
boot	1.3-24
brew	1.0-6
Cairo	1.2-0
caTools	1.18.0
cdsw	2.1
class	7.3-15
cli	2.0.1
cluster	2.1.0
codetools	0.2-16
colorspace	1.4-1
compiler	3.6.3
crayon	1.3.4
curl	4.3
datasets	3.6.3
digest	0.6.23
ellipsis	0.3.0
fansi	0.4.1
farver	2.0.3
foreigns	0.8-75
ggplot2	3.2.1
glue	1.3.1
graphics	3.6.3
grDevices	3.6.3
grid	3.6.3
gtable	0.3.0
httr	1.4.1
jsonlite	1.6
KernSmooth	2.23-16
labeling	0.3
lattice	0.20-38
lazyeval	0.2.2
lifecycle	0.1.0
magrittr	1.5

Library	Version
MASS	7.3-51.5
Matrix	1.2-18
methods	3.6.3
mgcv	1.8-31
mime	0.8
munsell	0.5.0
nlme	3.4-144
nnet	7.3-12
openssl	1.4.1
parallel	3.6.3
pillar	1.4.3
pkgconfig	2.0.3
plyr	1.8.5
png	0.1-7
R6	2.4.1
RColorBrewer	1.1-2
Rcpp	1.0.3
reshape2	1.4.3
RJSONIO	1.3-1.4
rlang	0.4.4
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.0
spatial	7.3-11
splines	3.6.3
stats	3.6.3
stats4	3.6.3
stringi	1.4.5
stringr	1.4.0
survival	3.1-8
sys	3.3
tcltk	3.6.3
tibble	2.1.3
tools	3.6.3
utf8	1.1.4
utils	3.6.3
vctrs	0.2.2
viridisLite	0.3.0

Library	Version
withr	2.1.2

ML Runtimes 2021.06

This section lists the Python and R libraries that ship with ML Runtimes 2021.06.



Note: Nvidia GPU Edition comes with CUDA 11.1 preinstalled.

Python 3.8.6 Libraries for Workbench

This section lists the Python 3.8.6 libraries for Workbench that ship with ML Runtimes 2021.06.

Table 198: Python 3.8.6 Libraries for Workbench - Standard

Library	Version
backcall	0.2.0
bitarray	2.10.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1

Library	Version
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Table 199: Python 3.8.6 Libraries for Workbench - Nvidia GPU Edition

Library	Version
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1

Library	Version
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Python 3.7.9 Libraries for Workbench

This section lists the Python 3.7.9 libraries for Workbench that ship with ML Runtimes 2021.06.

Table 200: Python 3.7.9 Libraries for Workbench - Standard

Library	Version
backcall	0.2.0
bitarray	2.10.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0

Library	Version
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Table 201: Python 3.7.9 Libraries for Workbench - Nvidia GPU Edition

Library	Version
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5

Library	Version
Pillow	8.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Python 3.6.12 Libraries for Workbench

This section lists the Python 3.6.12 Scala libraries for Workbench that ship with ML Runtimes 2021.06.

Table 202: Python 3.6.12 Libraries for Workbench - Standard

Library	Version
backcall	0.2.0
bitarray	2.10.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2

Library	Version
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Table 203: Python 3.6.12 Libraries for Workbench - Nvidia GPU Edition

Library	Version
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1

Library	Version
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Python 3.8.6 Libraries for JupyterLab

This section lists the Python 3.8.6 libraries for JupyterLab that ship with ML Runtimes 2021.06.

Table 204: Python 3.8.6 Libraries for JupyterLab - Standard

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0

Library	Version
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2

Library	Version
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1

Table 205: Python 3.8.6 Libraries for JupyterLab - Nvidia GPU Edition

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3

Library	Version
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pyparser	2.20
Pygments	2.8.1

Library	Version
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1

Python 3.7.9 Libraries for JupyterLab

This section lists the Python 3.7.9 libraries for JupyterLab that ship with ML Runtimes 2021.06.

Table 206: Python 3.7.9 Libraries for JupyterLab - Standard

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3

Library	Version
idna	2.10
importlib-metadata	3.4.0
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20

Library	Version
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.4.0

Table 207: Python 3.7.9 Libraries for JupyterLab - Nvidia GPU Edition

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3

Library	Version
idna	2.10
importlib-metadata	3.4.0
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20

Library	Version
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.4.0

Python 3.6.12 Libraries for JupyterLab

This section lists the Python 3.6.12 libraries for JupyterLab that ship with ML Runtimes 2021.06.

Table 208: Python 3.6.12 Libraries for JupyterLab - Standard

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
contextvars	2.4
cycler	0.10.0

Library	Version
dataclasses	0.8
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
immutables	0.14
importlib-metadata	3.4.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8

Library	Version
ptyprocess	0.6.0
py4j	0.10.9.1
pycparser	2.20
Pygments	2.7.2
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.4.0

Table 209: Python 3.6.12 Libraries for JupyterLab - Nvidia GPU Edition

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
contextvars	2.4
cycler	0.10.0
dataclasses	0.8
decorator	4.4.2

Library	Version
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
immutables	0.14
importlib-metadata	3.4.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
py4j	0.10.9.1

Library	Version
pycparser	2.20
Pygments	2.7.2
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.4.0

R 4.0 Libraries

This section lists the R 4.0 libraries that ship with ML Runtimes 2021.06.

Table 210: R 4.0 Libraries for Workbench

Library	Version
askpass	1.1
assertthat	0.2.1
base	4.0.4
bitops	1.0-6
boot	1.3-26
brew	1.0-6
Cairo	1.2-0
caTools	1.18.0
cdsw	2.1
class	7.3-18
cli	2.0.1
cluster	2.1.0
codetools	0.2-18

Library	Version
colorspace	1.4-1
compiler	4.0.4
crayon	1.3.4
curl	4.3
datasets	4.0.4
digest	0.6.23
ellipsis	0.3.0
fansi	0.4.1
farver	2.0.3
foreigns	0.8-81
ggplot2	3.2.1
glue	1.3.1
graphics	4.0.4
grDevices	4.0.4
grid	4.0.4
gtable	0.3.0
httr	1.4.1
jsonlite	1.6
KernSmooth	2.23-18
labeling	0.3
lattice	0.20-41
lazyeval	0.2.2
lifecycle	0.1.0
magrittr	1.5
MASS	7.3-53
Matrix	1.3-2
methods	4.0.4
mgcv	1.8-33
mime	0.8
munsell	0.5.0
nlme	3.1-152
nnet	7.3-15
openssl	1.4.1
parallel	4.0.4
pillar	1.4.3
pkgconfig	2.0.3
plyr	1.8.5
png	0.1-7
R6	2.4.1

Library	Version
RColorBrewer	1.1-2
Rcpp	1.0.3
reshape2	1.4.3
RJSONIO	1.3-1.4
rlang	0.4.4
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.0
spatial	7.3-13
splines	4.0.4
stats	4.0.4
stats4	4.0.4
stringi	1.4.5
stringr	1.4.0
survival	3.2-7
sys	3.3
tcltk	4.0.4
tibble	2.1.3
tools	4.0.4
utf8	1.1.4
utils	4.0.4
vctrs	0.2.2
viridisLite	0.3.0
withr	2.1.2

R 3.6 Libraries

This section lists the R 3.6 libraries that ship with ML Runtimes 2021.06.

Table 211: R 3.6 Libraries for Workbench

Library	Version
askpass	1.1
assertthat	0.2.1
base	3.6.3
bitops	1.0-6
boot	1.3-24
brew	1.0-6
Cairo	1.2-0
caTools	1.18.0

Library	Version
cdsw	2.1
class	7.3-15
cli	2.0.1
cluster	2.1.0
codetools	0.2-16
colorspace	1.4-1
compiler	3.6.3
crayon	1.3.4
curl	4.3
datasets	3.6.3
digest	0.6.23
ellipsis	0.3.0
fansi	0.4.1
farver	2.0.3
foreigns	0.8-75
ggplot2	3.2.1
glue	1.3.1
graphics	3.6.3
grDevices	3.6.3
grid	3.6.3
gtable	0.3.0
httr	1.4.1
jsonlite	1.6
KernSmooth	2.23-16
labeling	0.3
lattice	0.20-38
lazyeval	0.2.2
lifecycle	0.1.0
magrittr	1.5
MASS	7.3-51.5
Matrix	1.2-18
methods	3.6.3
mgcv	1.8-31
mime	0.8
munsell	0.5.0
nlme	3.4-144
nnet	7.3-12
openssl	1.4.1
parallel	3.6.3

Library	Version
pillar	1.4.3
pkgconfig	2.0.3
plyr	1.8.5
png	0.1-7
R6	2.4.1
RColorBrewer	1.1-2
Rcpp	1.0.3
reshape2	1.4.3
RJSONIO	1.3-1.4
rlang	0.4.4
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.0
spatial	7.3-11
splines	3.6.3
stats	3.6.3
stats4	3.6.3
stringi	1.4.5
stringr	1.4.0
survival	3.1-8
sys	3.3
tcltk	3.6.3
tibble	2.1.3
tools	3.6.3
utf8	1.1.4
utils	3.6.3
vctrs	0.2.2
viridisLite	0.3.0
withr	2.1.2

ML Runtimes 2021.04

This section lists the Python and R libraries that ship with ML Runtimes 2021.04.



Note: Nvidia GPU Edition comes with CUDA 11.1 preinstalled.

RAPIDS Runtime PIP Python 3.7.8 Libraries for Workbench

This section lists the RAPIDS Runtime Python 3.8 libraries for Workbench that ship with ML Runtimes 2021.04.

Table 212: RAPIDS Runtime Python 3.7.8 Libraries for Workbench - Standard

Package	Version
aiohttp	3.7.3
appdirs	1.4.4
argon2-cffi	20.1.0
async-generator	1.10
async-timeout	3.0.1
attrs	20.3.0
bleach	3.3.0
bokeh	2.2.3
brotlipy	0.7.0
cdsw	1.0.0
certifi	2020.12.5
cffi	1.14.5
chardet	4.0.0
click	7.1.2
click-plugins	1.1.1
cligj	0.7.1
cloudpickle	1.6.0
colorcet	2.0.6
confluent-kafka	1.5.0
cryptography	3.4.4
cudf	0.18.0a0+254.g1544474166
cudf-kafka	0.18.0a0+254.g1544474166
cugraph	0.18.0a0+301.g0cc951f7.dirty
cuml	0.18.0a0+134.g7ca2db287
cupy	8.0.0
cusignal	0.18.0a0+33.gbc8598c
cuspatial	0.18.0a0+24.g1a2fc18
custreamz	0.18.0a0+254.g1544474166
cuxfilter	0.18.0a0+68.g236aa39
cycler	0.10.0
cytoolz	0.11.0
dask	2021.2.0
dask-cuda	0.18.0a210225
dask-cudf	0.18.0a0+254.g1544474166
datashader	0.11.1
datashape	0.5.4
decorator	4.4.2

Package	Version
defusedxml	0.6.0
distributed	2021.2.0
entrypoints	0.3
fastavro	1.3.2
fastrlock	0.5
Fiona	1.8.18
fsspec	0.8.7
GDAL	3.1.4
geopandas	0.8.1
HeapDict	1.0.1
idna	2.10
importlib-metadata	3.7.0
ipykernel	5.5.0
ipython	7.20.0
ipython-genutils	0.2.0
ipywidgets	7.6.3
jedi	0.18.0
Jinja2	2.11.3
joblib	1.0.1
jsonschema	3.2.0
jupyter-client	6.1.11
jupyter-core	4.7.1
jupyter-server-proxy	1.6.0
jupyterlab-pygments	0.1.2
jupyterlab-widgets	1.0.0
kiwisolver	1.3.1
llvmlite	0.35.0
locket	0.2.0
Markdown	3.3.3
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
msgpack	1.0.2
multidict	5.1.0
multipledispatch	0.6.0
munch	2.5.0
nbclient	0.5.2
nbconvert	6.0.7
nbformat	5.1.2

Package	Version
nest-asyncio	1.4.3
networkx	2.5
notebook	6.2.0
numba	0.52.0
numpy	1.19.5
nvtx	0.2.3
olefile	0.46
packaging	20.9
pandas	1.1.5
pandocfilters	1.4.2
panel	0.10.3
param	1.10.1
parso	0.8.1
partd	1.1.0
pexpect	4.8.0
pickle5	0.0.11
pickleshare	0.7.5
Pillow	8.1.0
pip	21.0.1
prometheus-client	0.9.0
prompt-toolkit	3.0.16
protobuf	3.15.2
psutil	5.8.0
ptyprocess	0.7.0
py4j	0.10.9.1
pyarrow	1.0.1
pycparser	2.20
pyct	0.4.6
pydeck	0.5.0
pyee	7.0.4
Pygments	2.8.0
pynvml	8.0.4
pyOpenSSL	20.0.1
pyparsing	2.4.7
pyppeteer	0.2.2
pyproj	2.6.1.post1
PyQt5	5.12.3
PyQt5-sip	4.19.18
PyQtChart	5.12

Package	Version
PyQtWebEngine	5.12.1
pyrsistent	0.17.3
PySocks	1.7.1
python-dateutil	2.8.1
pytz	2021.1
pyviz-comms	2.0.1
PyYAML	5.4.1
pyzmq	22.0.3
requests	2.25.1
rmm	0.18.0
Rtree	0.9.7
scikit-learn	0.24.1
scipy	1.6.0
Send2Trash	1.5.0
setuptools	49.6.0.post20210108
Shapely	1.7.1
simpervisor	0.4
six	1.15.0
sortedcontainers	2.3.0
streamz	0.6.2
tblib	1.6.0
terminado	0.9.2
testpath	0.4.4
threadpoolctl	2.1.0
toolz	0.11.1
tornado	6.1
tqdm	4.57.0
traitlets	5.0.5
treelite	1.0.0
treelite-runtime	1.0.0
typing-extensions	3.7.4.3
ucx-py	0.18.0a0+19.ge17a4dc
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1
websockets	8.1
wheel	0.36.2
widgetsnbextension	3.5.1
xarray	0.16.2

Package	Version
xgboost	1.3.3
yarl	1.6.3
zict	2.0.0
zipp	3.4.0

RAPIDS Runtime PIP Python 3.8.6 Libraries for Workbench

This section lists the RAPIDS Runtime Python 3.8 libraries for Workbench that ship with ML Runtimes 2021.04.

Table 213: RAPIDS Runtime Python 3.7.8 Libraries for Workbench - Standard

Package	Version
aiohttp	3.7.3
appdirs	1.4.4
argon2-cffi	20.1.0
async-generator	1.10
async-timeout	3.0.1
attrs	20.3.0
backcall	0.2.0
backports.functools-lru-cache	1.6.1
bleach	3.3.0
bokeh	2.2.3
brotlipy	0.7.0
cdsw	1.0.0
certifi	2020.12.5
cffi	1.14.5
chardet	4.0.0
click	7.1.2
click-plugins	1.1.1
cligj	0.7.1
cloudpickle	1.6.0
colorcet	2.0.6
confluent-kafka	1.5.0
cryptography	3.4.4
cudf	0.18.0a0+254.g1544474166
cudf-kafka	0.18.0a0+254.g1544474166
cugraph	0.18.0a0+301.g0cc951f7.dirty
cuml	0.18.0a0+134.g7ca2db287
cupy	8.0.0
cusignal	0.18.0a0+33.gbc8598c
cuspatial	0.18.0a0+24.g1a2fc18

Package	Version
custreamz	0.18.0a0+254.g1544474166
cycler	0.10.0
cytoolz	0.11.0
dask	2021.2.0
dask-cuda	0.18.0a210225
dask-cudf	0.18.0a0+254.g1544474166
datashader	0.11.1
datashape	0.5.4
decorator	4.4.2
defusedxml	0.6.0
distributed	2021.2.0
entrypoints	0.3
fastavro	1.3.2
fastrlock	0.5
Fiona	1.8.18
fsspec	0.8.7
GDAL	3.1.4
geopandas	0.8.1
HeapDict	1.0.1
hupper	1.10.2
idna	2.10
importlib-metadata	3.7.0
ipykernel	5.5.0
ipython	7.20.0
ipython-genutils	0.2.0
ipywidgets	7.6.3
jedi	0.18.0
Jinja2	2.11.3
joblib	1.0.1
jsonschema	3.2.0
jupyter-client	6.1.11
jupyter-core	4.7.1
jupyter-server-proxy	1.6.0
jupyterlab-pygments	0.1.2
jupyterlab-widgets	1.0.0
kiwisolver	1.3.1
llvmlite	0.35.0
loket	0.2.0
Markdown	3.3.3

Package	Version
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
msgpack	1.0.2
multidict	5.1.0
multipledispatch	0.6.0
munch	2.5.0
nbclient	0.5.2
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.4.3
networkx	2.5
notebook	6.2.0
numba	0.52.0
numpy	1.19.5
nvtx	0.2.3
olefile	0.46
packaging	20.9
pandas	1.1.5
pandocfilters	1.4.2
panel	0.10.3
param	1.10.1
parso	0.8.1
partd	1.1.0
PasteDeploy	2.1.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
pip	21.0.1
plaster	1.0
plaster-pastedeploy	0.7
prometheus-client	0.9.0
prompt-toolkit	3.0.16
protobuf	3.15.2
psutil	5.8.0
ptyprocess	0.7.0
py4j	0.10.9.1
pyarrow	1.0.1
pycparser	2.20

Package	Version
pypct	0.4.6
pydeck	0.5.0
pyee	7.0.4
Pygments	2.8.0
pynvml	8.0.4
pyOpenSSL	20.0.1
pyparsing	2.4.7
pyppeteer	0.2.2
pyproj	2.6.1.post1
PyQt5	5.12.3
PyQt5-sip	4.19.18
PyQtChart	5.12
PyQtWebEngine	5.12.1
pyramid	2.0
pyrsistent	0.17.3
PySocks	1.7.1
python-dateutil	2.8.1
pytz	2021.1
pyviz-comms	2.0.1
PyYAML	5.4.1
pyzmq	22.0.3
rapids	0.0.1
requests	2.25.1
rmm	0.18.0
Rtree	0.9.7
scikit-learn	0.24.1
scipy	1.6.0
Send2Trash	1.5.0
setuptools	49.6.0.post20210108
Shapely	1.7.1
simpervisor	0.4
six	1.15.0
sortedcontainers	2.3.0
streamz	0.6.2
tblib	1.6.0
terminado	0.9.2
testpath	0.4.4
threadpoolctl	2.1.0
toolz	0.11.1

Package	Version
tornado	6.1
tqdm	4.57.0
traitlets	5.0.5
translationstring	1.4
treelite	1.0.0
treelite-runtime	1.0.0
typing-extensions	3.7.4.3
ucx-py	0.18.0a0+19.ge17a4dc
urllib3	1.26.3
venusian	3.0.0
wcwidth	0.2.5
webencodings	0.5.1
WebOb	1.8.7
websockets	8.1
wheel	0.36.2
widgetsnextension	3.5.1
xarray	0.16.2
xgboost	1.3.3
yaml	1.6.3
zict	2.0.0
zipp	3.4.0
zope.deprecation	4.4.0
zope.interface	5.4.0

RAPIDS Runtime PIP Python 3.7.8 Libraries for JupyterLab

This section lists the RAPIDS Runtime Python 3.7.8 libraries for JupyterLab that ship with ML Runtimes 2021.04.

Table 214: RAPIDS Runtime Python 3.7.8 Libraries for JupyterLab - Standard

Package	Version
aiohttp	3.7.3
anyio	2.0.2
appdirs	1.4.4
argon2-cffi	20.1.0
async-generator	1.10
async-timeout	3.0.1
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
backports.functools-lru-cache	1.6.1

Package	Version
bleach	3.3.0
bokeh	2.2.3
brotlipy	0.7.0
cds	1.0.0
certifi	2020.12.5
cffi	1.14.5
chardet	4.0.0
click	7.1.2
click-plugins	1.1.1
cligj	0.7.1
cloudpickle	1.6.0
colorcet	2.0.6
confluent-kafka	1.5.0
cryptography	3.4.4
cudf	0.18.0a0+254.g1544474166
cudf-kafka	0.18.0a0+254.g1544474166
cugraph	0.18.0a0+301.g0cc951f7.dirty
cuml	0.18.0a0+134.g7ca2db287
cupy	8.0.0
cusignal	0.18.0a0+33.gbc8598c
cuspatial	0.18.0a0+24.g1a2fc18
custreamz	0.18.0a0+254.g1544474166
cuxfilter	0.18.0a0+68.g236aa39
cycler	0.10.0
cytoolz	0.11.0
dask	2021.2.0
dask-cuda	0.18.0a210225
dask-cudf	0.18.0a0+254.g1544474166
datashader	0.11.1
datashape	0.5.4
decorator	4.4.2
defusedxml	0.6.0
distributed	2021.2.0
entrypoints	0.3
fastavro	1.3.2
fastrlock	0.5
Fiona	1.8.18
fsspec	0.8.7
GDAL	3.1.4

Package	Version
geopandas	0.8.1
HeapDict	1.0.1
idna	2.10
importlib-metadata	3.7.0
ipykernel	5.5.0
ipython	7.20.0
ipython-genutils	0.2.0
ipywidgets	7.6.3
jedi	0.18.0
Jinja2	2.11.3
joblib	1.0.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.11
jupyter-core	4.7.1
jupyter-server	1.2.2
jupyter-server-proxy	1.6.0
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
jupyterlab-widgets	1.0.0
kiwisolver	1.3.1
llvmlite	0.35.0
locket	0.2.0
Markdown	3.3.3
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
msgpack	1.0.2
multidict	5.1.0
multipledispatch	0.6.0
munch	2.5.0
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.4.3
networkx	2.5
notebook	6.2.0

Package	Version
numba	0.52.0
numpy	1.19.5
nvtx	0.2.3
olefile	0.46
packaging	20.9
pandas	1.1.5
pandocfilters	1.4.2
panel	0.10.3
param	1.10.1
parso	0.8.1
partd	1.1.0
pexpect	4.8.0
pickle5	0.0.11
pickleshare	0.7.5
Pillow	8.1.0
pip	21.0.1
prometheus-client	0.9.0
prompt-toolkit	3.0.16
protobuf	3.15.2
psutil	5.8.0
ptyprocess	0.7.0
py4j	0.10.9.1
pyarrow	1.0.1
pycparser	2.20
pyct	0.4.6
pydeck	0.5.0
pyee	7.0.4
Pygments	2.8.0
pynvml	8.0.4
pyOpenSSL	20.0.1
pyparsing	2.4.7
pypeteer	0.2.2
pyproj	2.6.1.post1
PyQt5	5.12.3
PyQt5-sip	4.19.18
PyQtChart	5.12
PyQtWebEngine	5.12.1
pyrsistent	0.17.3
PySocks	1.7.1

Package	Version
python-dateutil	2.8.1
pytz	2021.1
pyviz-comms	2.0.1
PyYAML	5.4.1
pyzmq	22.0.3
requests	2.25.1
rmm	0.18.0
Rtree	0.9.7
scikit-learn	0.24.1
scipy	1.6.0
Send2Trash	1.5.0
setuptools	49.6.0.post20210108
Shapely	1.7.1
simpervisor	0.4
six	1.15.0
sniffio	1.2.0
sortedcontainers	2.3.0
streamz	0.6.2
tblib	1.6.0
terminado	0.9.2
testpath	0.4.4
threadpoolctl	2.1.0
toolz	0.11.1
tornado	6.1
tqdm	4.57.0
traitlets	5.0.5
treelite	1.0.0
treelite-runtime	1.0.0
typing-extensions	3.7.4.3
ucx-py	0.18.0a0+19.ge17a4dc
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1
websockets	8.1
wheel	0.36.2
widgetsnbextension	3.5.1
xarray	0.16.2
xgboost	1.3.3
yaml	1.6.3

Package	Version
zict	2.0.0
zipp	3.4.0

RAPIDS Runtime PIP Python 3.8.6 Libraries for JupyterLab

This section lists the RAPIDS Runtime Python 3.8.6 libraries for JupyterLab that ship with ML Runtimes 2021.04.

Table 215: RAPIDS Runtime Python 3.86 Libraries for JupyterLab - Standard

Package	Version
aiohttp	3.7.3
anyio	2.0.2
appdirs	1.4.4
argon2-cffi	20.1.0
async-generator	1.10
async-timeout	3.0.1
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
backports.functools-lru-cache	1.6.1
bleach	3.3.0
bokeh	2.2.3
brotlipy	0.7.0
cdsw	1.0.0
certifi	2020.12.5
cffi	1.14.5
chardet	4.0.0
click	7.1.2
click-plugins	1.1.1
cligj	0.7.1
cloudpickle	1.6.0
colorcet	2.0.6
confluent-kafka	1.5.0
cryptography	3.4.4
cudf	0.18.0a0+254.g1544474166
cudf-kafka	0.18.0a0+254.g1544474166
cugraph	0.18.0a0+301.g0cc951f7.dirty
cuml	0.18.0a0+134.g7ca2db287
cupy	8.0.0
cusignal	0.18.0a0+33.gbc8598c
cuspatial	0.18.0a0+24.g1a2fc18

Package	Version
custreamz	0.18.0a0+254.g1544474166
cycler	0.10.0
cytoolz	0.11.0
dask	2021.2.0
dask-cuda	0.18.0a210225
dask-cudf	0.18.0a0+254.g1544474166
datashader	0.11.1
datashape	0.5.4
decorator	4.4.2
defusedxml	0.6.0
distributed	2021.2.0
entrypoints	0.3
fastavro	1.3.2
fastrlock	0.5
Fiona	1.8.18
fsspec	0.8.7
GDAL	3.1.4
geopandas	0.8.1
HeapDict	1.0.1
hupper	1.10.2
idna	2.10
importlib-metadata	3.7.0
ipykernel	5.5.0
ipython	7.20.0
ipython-genutils	0.2.0
ipywidgets	7.6.3
jedi	0.18.0
Jinja2	2.11.3
joblib	1.0.1
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.11
jupyter-core	4.7.1
jupyter-server	1.2.2
jupyter-server-proxy	1.6.0
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
jupyterlab-widgets	1.0.0

Package	Version
kiwisolver	1.3.1
llvmlite	0.35.0
loket	0.2.0
Markdown	3.3.3
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
msgpack	1.0.2
multidict	5.1.0
multipledispatch	0.6.0
munch	2.5.0
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.4.3
networkx	2.5
notebook	6.2.0
numba	0.52.0
numpy	1.19.5
nvtx	0.2.3
olefile	0.46
packaging	20.9
pandas	1.1.5
pandocfilters	1.4.2
panel	0.10.3
param	1.10.1
parso	0.8.1
partd	1.1.0
PasteDeploy	2.1.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
pip	21.0.1
plaster	1.0
plaster-pastedeploy	0.7
prometheus-client	0.9.0
prompt-toolkit	3.0.16
protobuf	3.15.2

Package	Version
psutil	5.8.0
ptyprocess	0.7.0
py4j	0.10.9.1
pyarrow	1.0.1
pycparser	2.20
pyct	0.4.6
pydeck	0.5.0
pyee	7.0.4
Pygments	2.8.0
pynvml	8.0.4
pyOpenSSL	20.0.1
pyparsing	2.4.7
pyppeteer	0.2.2
pyproj	2.6.1.post1
PyQt5	5.12.3
PyQt5-sip	4.19.18
PyQtChart	5.12
PyQtWebEngine	5.12.1
pyramid	2.0
pyrsistent	0.17.3
PySocks	1.7.1
python-dateutil	2.8.1
pytz	2021.1
pyviz-comms	2.0.1
PyYAML	5.4.1
pyzmq	22.0.3
rapids	0.0.1
requests	2.25.1
rmm	0.18.0
Rtree	0.9.7
scikit-learn	0.24.1
scipy	1.6.0
Send2Trash	1.5.0
setuptools	49.6.0.post20210108
Shapely	1.7.1
simpervisor	0.4
six	1.15.0
sniffio	1.2.0
sortedcontainers	2.3.0

Package	Version
streamz	0.6.2
tblib	1.6.0
terminado	0.9.2
testpath	0.4.4
threadpoolctl	2.1.0
toolz	0.11.1
tornado	6.1
tqdm	4.57.0
traitlets	5.0.5
translationstring	1.4
treelite	1.0.0
treelite-runtime	1.0.0
typing-extensions	3.7.4.3
ucx-py	0.18.0a0+19.ge17a4dc
urllib3	1.26.3
venusian	3.0.0
wcwidth	0.2.5
webencodings	0.5.1
WebOb	1.8.7
websockets	8.1
wheel	0.36.2
widgetsnbextension	3.5.1
xarray	0.16.2
xgboost	1.3.3
yaml	1.6.3
zict	2.0.0
zipp	3.4.0
zope.deprecation	4.4.0
zope.interface	5.4.0

ML Runtimes 2021.02

This section lists the Python and R libraries that ship with ML Runtimes 2021.02.



Note: Nvidia GPU Edition comes with CUDA 11.1 preinstalled.

Python 3.8 Libraries for Workbench

This section lists the Python 3.8 libraries for Workbench that ship with ML Runtimes 2021.02.

Table 216: Python 3.8.6 Libraries for Workbench - Standard

Library	Version
backcall	0.2.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
py4j	0.10.9.1
Pygments	2.7.2
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Table 217: Python 3.8.6 Libraries for Workbench - Nvidia GPU Edition

Library	Version
backcall	0.2.0
certifi	2020.12.5
chardet	4.0.0

Library	Version
cycler	0.10.0
decorator	4.4.2
idna	2.10
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
py4j	0.10.9.1
Pygments	2.7.2
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Python 3.7 Libraries for Workbench

This section lists the Python 3.7 libraries for Workbench that ship with ML Runtimes 2021.02.

Table 218: Python 3.7.9 Libraries for Workbench - Standard

Library	Version
backcall	0.2.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0

Library	Version
decorator	4.4.2
idna	2.10
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
py4j	0.10.9.1
Pygments	2.7.2
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Table 219: Python 3.7.9 Libraries for Workbench - Nvidia GPU Edition

Library	Version
backcall	0.2.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
ipykernel	5.3.4
ipython	7.16.1

Library	Version
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
py4j	0.10.9.1
Pygments	2.7.2
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Python 3.6 Libraries for Workbench

This section lists the Python 3.6 Scala libraries for Workbench that ship with ML Runtimes 2021.02.

Table 220: Python 3.6.12 Libraries for Workbench - Standard

Library	Version
backcall	0.2.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0

Library	Version
jedi	0.17.2
jupyter-client	6.1.7
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
py4j	0.10.9.1
Pygments	2.7.2
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Table 221: Python 3.6.12 Libraries for Workbench - Nvidia GPU Edition

Library	Version
backcall	0.2.0
bitarray	2.1.0
certifi	2020.12.5
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
jupyter-client	6.1.7

Library	Version
jupyter-core	4.6.3
kiwisolver	1.3.1
matplotlib	3.3.2
numpy	1.19.4
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
Pygments	2.8.1
pyparsing	2.4.7
python-dateutil	2.8.1
pyzmq	19.0.2
requests	2.25.1
six	1.15.0
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5

Python 3.8 Libraries for JupyterLab

This section lists the Python 3.8 libraries for JupyterLab that ship with ML Runtimes 2021.02.

Table 222: Python 3.8.6 Libraries for JupyterLab - Standard

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4

Library	Version
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8

Library	Version
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1

Table 223: Python 3.8.6 Libraries for JupyterLab - Nvidia GPU Edition

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0

Library	Version
entrypoints	0.3
idna	2.10
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
py4j	0.10.9.1
pyparser	2.20
Pygments	2.7.2
pyparsing	2.4.7

Library	Version
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
tornado	6.1
traitlets	4.3.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1

Python 3.7 Libraries for JupyterLab

This section lists the Python 3.7 libraries for JupyterLab that ship with ML Runtimes 2021.02.

Table 224: Python 3.7.9 Libraries for JupyterLab - Standard

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
importlib-metadata	3.4.0
ipykernel	5.3.4
ipython	7.16.1

Library	Version
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
py4j	0.10.9.1
pycparser	2.20
Pygments	2.7.2
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2

Library	Version
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.4.0

Table 225: Python 3.7.9 Libraries for JupyterLab - Nvidia GPU Edition

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
cycler	0.10.0
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
importlib-metadata	3.4.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0

Library	Version
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
py4j	0.10.9.1
pycparser	2.20
Pygments	2.7.2
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2

Library	Version
testpath	0.4.4
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.4.0

Python 3.6 Libraries for JupyterLab

This section lists the Python 3.6 libraries for JupyterLab that ship with ML Runtimes 2021.02.

Table 226: Python 3.6.12 Libraries for JupyterLab - Standard

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bitarray	2.1.0
bleach	3.3.0
certifi	2020.12.8
cffi	1.14.4
chardet	4.0.0
contextvars	2.4
cycler	0.10.0
dataclasses	0.8
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
immutables	0.14
importlib-metadata	3.4.0
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1
ipython-genutils	0.2.0
jedi	0.17.2

Library	Version
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.2.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
pure-sasl	0.6.2
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2
requests	2.25.1

Library	Version
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.4.0

Table 227: Python 3.6.12 Libraries for JupyterLab - Nvidia GPU Edition

Library	Version
anyio	2.0.2
argon2-cffi	20.1.0
async-generator	1.10
attrs	20.3.0
Babel	2.9.0
backcall	0.2.0
bleach	3.3.0
certifi	2020.11.8
cffi	1.14.4
chardet	4.0.0
contextvars	2.4
cycler	0.10.0
dataclasses	0.8
decorator	4.4.2
defusedxml	0.6.0
entrypoints	0.3
idna	2.10
immutables	0.14
importlib-metadata	3.4.0
impyla	0.17.0
ipykernel	5.3.4
ipython	7.16.1

Library	Version
ipython-genutils	0.2.0
jedi	0.17.2
Jinja2	2.11.3
json5	0.9.5
jsonschema	3.2.0
jupyter-client	6.1.7
jupyter-core	4.6.3
jupyter-server	1.2.2
jupyterlab	3.0.6
jupyterlab-pygments	0.1.2
jupyterlab-server	2.1.3
kiwisolver	1.3.1
MarkupSafe	1.1.1
matplotlib	3.3.2
mistune	0.8.4
nbclassic	0.2.6
nbclient	0.5.1
nbconvert	6.0.7
nbformat	5.1.2
nest-asyncio	1.5.1
notebook	6.2.0
numpy	1.19.4
packaging	20.9
pandocfilters	1.4.3
parso	0.7.1
pexpect	4.8.0
pickleshare	0.7.5
Pillow	8.1.0
prometheus-client	0.9.0
prompt-toolkit	3.0.8
ptyprocess	0.6.0
py4j	0.10.9.1
pycparser	2.20
Pygments	2.8.1
pyparsing	2.4.7
pyrsistent	0.17.3
python-dateutil	2.8.1
pytz	2021.1
pyzmq	19.0.2

Library	Version
requests	2.25.1
Send2Trash	1.5.0
six	1.15.0
sniffio	1.2.0
terminado	0.9.2
testpath	0.4.4
thrift	0.11.0
thrift-sasl	0.4.3
tornado	6.1
traitlets	4.3.3
typing-extensions	3.7.4.3
urllib3	1.26.3
wcwidth	0.2.5
webencodings	0.5.1
zipp	3.4.0

R 4.0 Libraries

This section lists the R 4.0 libraries that ship with ML Runtimes 2021.02.

Table 228: R 4.0 Libraries for Workbench

Library	Version
askpass	1.1
assertthat	0.2.1
base	4.0.3
bitops	1.0-6
boot	1.3-25
brew	1.0-6
Cairo	1.2-0
caTools	1.18.0
cdsw	2.1
class	7.3-17
cli	2.0.1
cluster	2.1.0
codetools	0.2-16
colorspace	1.4-1
compiler	4.0.3
crayon	1.3.4
curl	4.3
datasets	4.0.3

Library	Version
digest	0.6.23
ellipsis	0.3.0
fansi	0.4.1
farver	2.0.3
foreigns	0.8-80
ggplot2	3.2.1
glue	1.3.1
graphics	4.0.3
grDevices	4.0.3
grid	4.0.3
gtable	0.3.0
httr	1.4.1
jsonlite	1.6
KernSmooth	2.23-17
labeling	0.3
lattice	0.20-41
lazyeval	0.2.2
lifecycle	0.1.0
magrittr	1.5
MASS	7.3-53
Matrix	1.2-18
methods	4.0.3
mgcv	1.8-33
mime	0.8
munsell	0.5.0
nlme	3.1-149
nnet	7.3-14
openssl	1.4.1
parallel	4.0.3
pillar	1.4.3
pkgconfig	2.0.3
plyr	1.8.5
png	0.1-7
R6	2.4.1
RColorBrewer	1.1-2
Rcpp	1.0.3
reshape2	1.4.3
RJSONIO	1.3-1.4
rlang	0.4.4

Library	Version
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.0
spatial	7.3-12
splines	4.0.3
stats	4.0.3
stats4	4.0.3
stringi	1.4.5
stringr	1.4.0
survival	3.2-7
sys	3.3
tcltk	4.0.3
tibble	2.1.3
tools	4.0.3
utf8	1.1.4
utils	4.0.3
vctrs	0.2.2
viridisLite	0.3.0
withr	2.1.2

R 3.6 Libraries

This section lists the R 3.6 libraries that ship with ML Runtimes 2021.02.

Table 229: R 3.6 Libraries for Workbench

Library	Version
askpass	1.1
assertthat	0.2.1
base	3.6.3
bitops	1.0-6
boot	1.3-24
brew	1.0-6
Cairo	1.2-0
caTools	1.18.0
cdsw	2.1
class	7.3-15
cli	2.0.1
cluster	2.1.0
codetools	0.2-16

Library	Version
colorspace	1.4-1
compiler	3.6.3
crayon	1.3.4
curl	4.3
datasets	3.6.3
digest	0.6.23
ellipsis	0.3.0
fansi	0.4.1
farver	2.0.3
foreigns	0.8-75
ggplot2	3.2.1
glue	1.3.1
graphics	3.6.3
grDevices	3.6.3
grid	3.6.3
gtable	0.3.0
httr	1.4.1
jsonlite	1.6
KernSmooth	2.23-16
labeling	0.3
lattice	0.20-38
lazyeval	0.2.2
lifecycle	0.1.0
magrittr	1.5
MASS	7.3-51.5
Matrix	1.2-18
methods	3.6.3
mgcv	1.8-31
mime	0.8
munsell	0.5.0
nlme	3.4-144
nnet	7.3-12
openssl	1.4.1
parallel	3.6.3
pillar	1.4.3
pkgconfig	2.0.3
plyr	1.8.5
png	0.1-7
R6	2.4.1

Library	Version
RColorBrewer	1.1-2
Rcpp	1.0.3
reshape2	1.4.3
RJSONIO	1.3-1.4
rlang	0.4.4
Rook	1.1-1
rpart	4.1-15
Rserve	1.7-0
scales	1.1.0
spatial	7.3-11
splines	3.6.3
stats	3.6.3
stats4	3.6.3
stringi	1.4.5
stringr	1.4.0
survival	3.1-8
sys	3.3
tcltk	3.6.3
tibble	2.1.3
tools	3.6.3
utf8	1.1.4
utils	3.6.3
vctrs	0.2.2
viridisLite	0.3.0
withr	2.1.2

ML Runtimes 2020.11

This section lists the Python and R libraries that ship with ML Runtimes 2020.11.

All ML Runtimes 2020.11 contain NumPy 1.19.2 and Matplotlib 3.1.2.

- Matplotlib - 3.1.2
- NumPy - 1.19.2 and the Python versions, which are 3.6.10, 3.7.9, and 3.8.3