

## Ranger Auditing

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## Audit Overview

Apache Ranger provides a centralized framework for collecting access audit history and reporting data, including filtering on various parameters. Ranger enhances audit information obtained from Hadoop components and provides insights through this centralized reporting capability.

## Managing Auditing with Ranger

To explore options for auditing policies in Ranger, click Audit in the top menu.

Policy ID	Policy Version	Event Time	Application	User	Service Name / Type	Resource Name / Type	Access Type	Result	Access Enforcer	Agent Host Name	Client IP	C
3	1	07/21/2019 12:21:35 PM	hbaseMaster	hbase	cm_hbase hbase	--	balance	Allowed	ranger-acl	dhoyle-7-1-1.vpc.cloudera.com		C
3	1	07/21/2019 12:16:30 PM	hbaseMaster	hbase	cm_hbase hbase	--	balance	Allowed	ranger-acl	dhoyle-7-1-1.vpc.cloudera.com		C
3	1	07/21/2019 12:11:30 PM	hbaseMaster	hbase	cm_hbase hbase	--	balance	Allowed	ranger-acl	dhoyle-7-1-1.vpc.cloudera.com		C
3	1	07/21/2019 12:06:30 PM	hbaseMaster	hbase	cm_hbase hbase	--	balance	Allowed	ranger-acl	dhoyle-7-1-1.vpc.cloudera.com		C

There are six tabs on the Audit page:

- Access
- Admin
- Login sessions
- Plugins
- Plugin Status
- User Sync

## View audit details

How to view operation details in Ranger audits.

### Procedure

To view details for a particular operation, click any tab, then Policy ID, Operation name, or Session ID.

## Audit > Admin: Update

The screenshot displays the 'Access Manager' application. At the top, there are navigation tabs: 'Access Manager', 'Audit', 'Security Zone', and 'Settings'. Below these is a header bar with 'ACCESS', 'Admin', 'Login Sessions', 'Plugins', 'Plugin Status', and 'User Sync'. A search bar is present with the text 'Search for your access logs...'. The main content area shows a table of operations with columns: Operation, Audit Type, User, Date (Eastern Daylight Time), Actions, and Session Id. The table lists various operations like 'Service updated tag\_service2', 'Group created temp\_employees', etc. A blue arrow points to the 'Update' button in the 'Actions' column for the first row. A modal window titled 'Operation : update' is open, showing details for the operation 'tag\_service2' and a table of service details.

Operation : update

Name : tag\_service2  
Date : 07/21/2019 01:09:34 PM Eastern Daylight Time  
Updated By : admin

Service Details :

Fields	Old Value	New Value
Service Description	--	--
Service Name	tag_tag	tag_service2

OK

## Audit > Admin: Create

[illegible]

## Audit > User Sync: Sync details

The screenshot shows the Ranger Admin console interface. At the top, there's a navigation bar with 'Ranger', 'Access Manager', 'Audit', 'Security Zone', 'Settings', and a user profile 'admin'. Below this is a sub-navigation bar with tabs: 'Access', 'Admin', 'Login Sessions', 'Plugins', 'Plugin Status', and 'User Sync'. The 'User Sync' tab is active. A search bar contains 'START DATE: 07/21/2019'. Below the search bar, it says 'Entries : 1 to 25 of 803' and 'Last Updated Time : 07/21/2019 01:23:45 PM'. The main table has columns: 'User Name', 'Sync Source', 'Number Of New Users', 'Number Of New Groups', 'Number Of Modified Users', 'Number Of Modified Groups', 'Event Time', and 'Sync Details'. The table lists multiple sync events for 'rangerusersync' from a 'Unix' source. A modal window titled 'Sync Details' is open, showing a table of configuration parameters:

Name	Value
Unix	nss
File Name	/etc/passwd
Sync time	07/21/2019 10:21:48 AM
Last modified time	12/31/1969 04:00:00 PM
Minimum user id	500
Minimum group id	0
Total number of users synced	35
Total number of groups synced	39

An 'OK' button is at the bottom right of the modal. A blue arrow points from the 'Sync Details' icon in the table to the modal.

## Create a read-only Admin user (Auditor)

Creating a read-only Admin user (Auditor) enables compliance activities because this user can monitor policies and audit events, but cannot make changes.

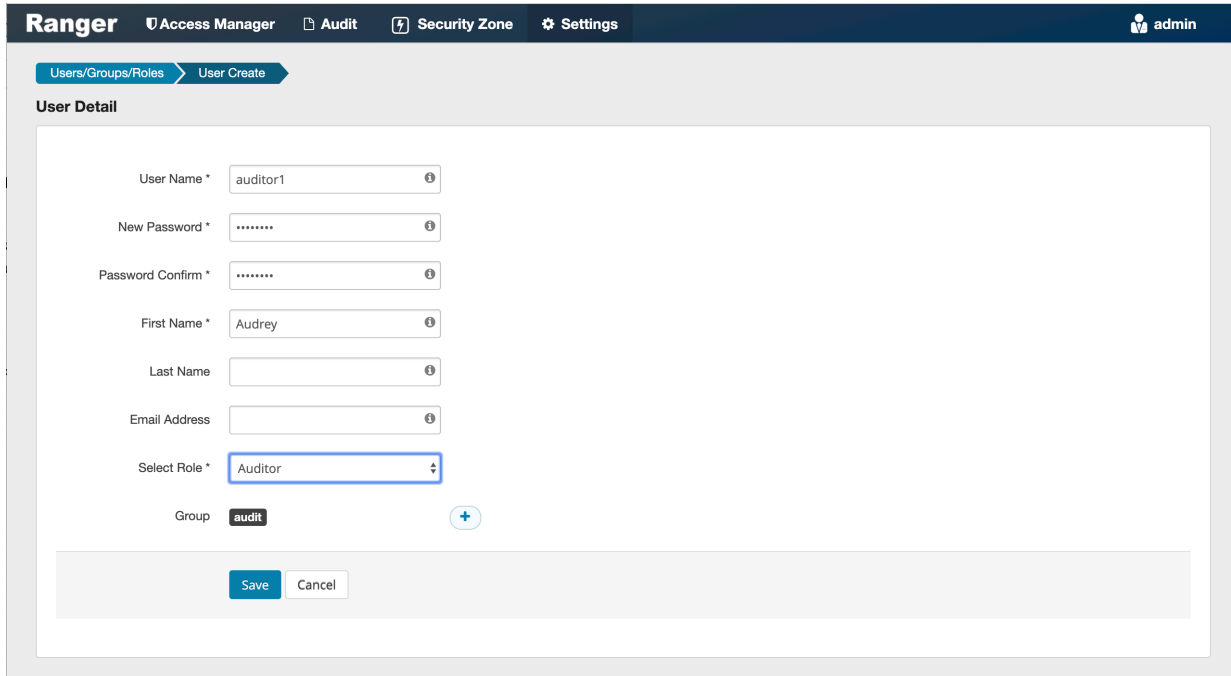
### About this task

When a user with the Auditor role logs in, they see a read-only view of Ranger policies and audit events. An Auditor can search and filter on access audit events, and access and view all tabs under Audit to understand access events. They cannot edit users or groups, export/import policies, or make changes of any kind.

### Procedure

1. Select Settings > Users/Groups/Roles.
2. Click Add New User.

3. Complete the **User Detail** section, selecting Auditor as the role:



The screenshot shows the Ranger web interface for creating a new user. The top navigation bar includes 'Ranger', 'Access Manager', 'Audit', 'Security Zone', and 'Settings', with a user profile 'admin' on the right. Below the navigation bar, a breadcrumb trail shows 'Users/Groups/Roles' and 'User Create'. The main section is titled 'User Detail' and contains the following fields:

- User Name \*: auditor1
- New Password \*: [masked]
- Password Confirm \*: [masked]
- First Name \*: Audrey
- Last Name: [empty]
- Email Address: [empty]
- Select Role \*: Auditor (highlighted with a blue border)
- Group: audit (with a plus icon to add more groups)

At the bottom of the form are 'Save' and 'Cancel' buttons.

4. Click Save.