

Cloudera Runtime 7.1.0

Ranger Auditing

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CLOUdera

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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

Ranger

Access Manager

Audit

Security Zone

Settings

admin

Access

Admin

Login Sessions

Plugins

Plugin Status

User Sync

START DATE: 07/21/2019

Exclude Service Users :

Entries : 1 to 25 of 25

Policy ID	Policy Version	Event Time	Application	User	Service Name / Type	Resource Name / Type	Access Type	Result	Access	Access	Access
3	1	07/21/2019 12:51:30 PM	hbaseMaster	hbase	cm_hbase hbase	--	balance	Allowed	ranger-		
3	1	07/21/2019 12:46:30 PM	hbaseMaster	hbase	cm_hbase hbase	--	balance	Allowed	ranger-		
3	1	07/21/2019 12:41:30 PM	hbaseMaster	hbase	cm_hbase hbase	--	balance	Allowed	ranger-acl	dhoyle-7-1-1.vpc.cloudera.com	C
3	1	07/21/2019 12:36:30 PM	hbaseMaster	hbase	cm_hbase hbase	--	balance	Allowed	ranger-acl	dhoyle-7-1-1.vpc.cloudera.com	C
3	1	07/21/2019 12:31:31 PM	hbaseMaster	hbase	cm_hbase hbase	--	balance	Allowed	ranger-acl	dhoyle-7-1-1.vpc.cloudera.com	C
3	1	07/21/2019 12:26:30 PM	hbaseMaster	hbase	cm_hbase hbase	--	balance	Allowed	ranger-acl	dhoyle-7-1-1.vpc.cloudera.com	C

Policy Details

Service Name : cm_hbase

Service Type : hbase

Policy Details :

Policy Type

Policy ID

Version

Policy Name

HBase Table

HBase Column-family

HBase Column

Description

Audit Logging

Policy Labels

Access

3

1

all - table, column-family, column

Enabled

Includes

Includes

Includes

Policy for all - table, column-family, column

Yes

--

Allow Condition :

Version 1

OK

[illegible]

[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', and 'Settings'. The 'Audit' tab is selected, and the 'User Sync' sub-tab is active. Below the navigation bar, there's a search bar with 'START DATE: 07/21/2019'. The main content area displays a table of sync events. The 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. A modal window titled 'Sync Details' is open, showing a list of configuration parameters and their values. A blue arrow points from the 'Sync Details' icon in the table to the modal window.

User Name	Sync Source	Number Of New		Number Of Modified		Event Time	Sync Details
		Users	Groups	Users	Groups		
rangerusersync	Unix	0	0	0	0	07/21/2019 01:22:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:21:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:20:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:19:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:18:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:17:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:16:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:15:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:14:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:13:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:12:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:11:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:10:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:09:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:08:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:07:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:06:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:05:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:04:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:03:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:02:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:01:48 PM	[Eye Icon]
rangerusersync	Unix	0	0	0	0	07/21/2019 01:00:47 PM	[Eye Icon]

Sync Details

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

OK

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.

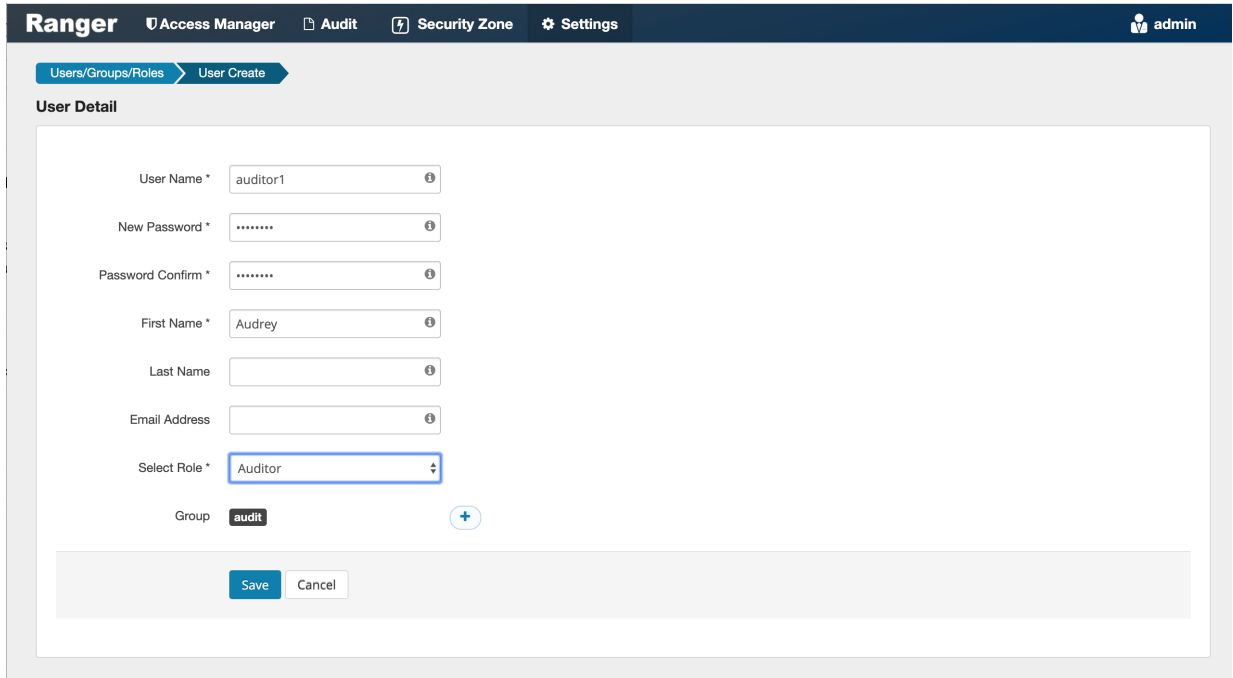
About this task

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'. The user 'admin' is logged in. The breadcrumb trail shows 'Users/Groups/Roles' and 'User Create'. The 'User Detail' section 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 '+' button to add more groups)

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

4. Click Save.