Audit Reference

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Managing Auditing in Ranger: Access

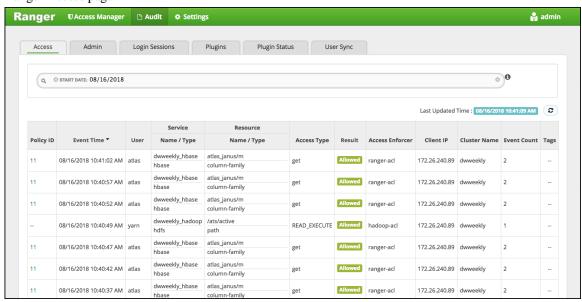
In Ranger, the Access page provides service activity data for all Policies that have Audit set to On. The default service Policy is configured to log all user activity within the Service. This default policy does not contain user and group access rules.

You can filter the data based on the following criteria:

Table 1: Search Criteria

| Search Criteria | Description |
|----------------------|---|
| Access Enforcer | Ranger (ranger-acl) or Hadoop (hadoop-acl) |
| Access Type | Type of access user attempted (E.G., REVOKE, GRANT, OPEN, USE). |
| Client IP | IP address of the user system that tried to access the resource. |
| Result | Shows whether the operation was successful or not. |
| Service Name / Type | The name and type of the service that the user tried to access. |
| Resource Name / Type | The resource name and type of the service that the user tried to access. For Hive events, this field will display the Hive query the user ran. |
| Start Date, End Date | Filters results for a particular date range. |
| User | Name of the user which tried to access the resource. |
| Cluster Name | Cluster name. Can be defined under Ambari>component>Configs>Advanced>ranger-component-audit file, using ranger.plugin.component.ambari.cluster.name=cluster_name. |

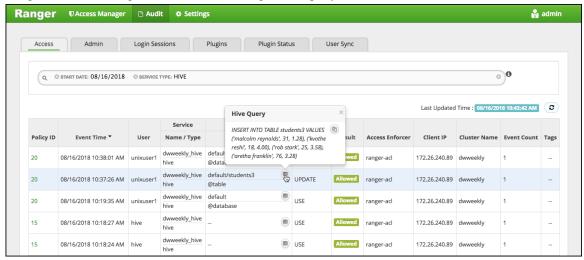
Ranger Access page:



Ranger Access showing tag attribute details:



Ranger Access showing user 'unixuser1' running a Hive query:



Managing Auditing in Ranger: Admin

In Ranger, the Admin tab contains all events for the auditing HDP Security Administration Web UI, including Service, Service Manager, Log in, etc. (actions like create, update, delete, password change).

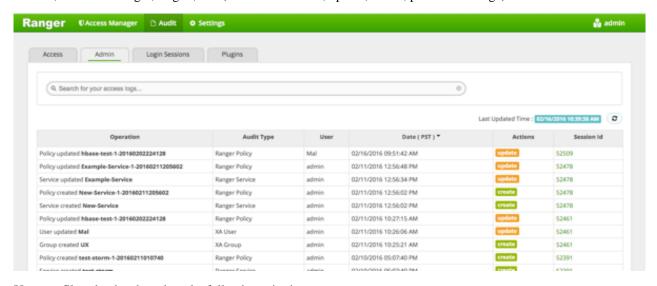


Table 2: Search Criteria

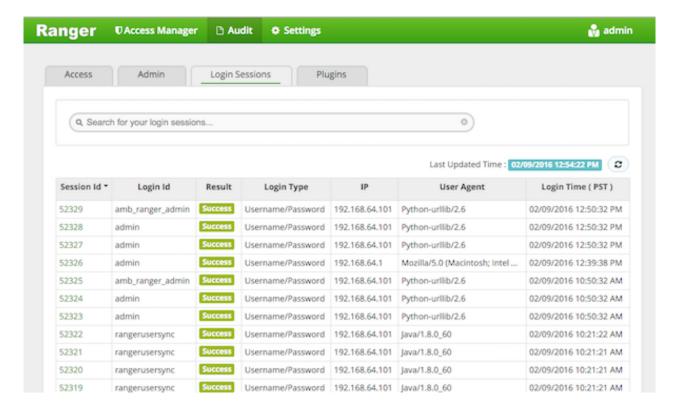
| Search Criteria | Description |
|-----------------|--|
| Action | These are operations performed on resources (actions like create, update, delete, password change). |
| Audit Type | There are three values Resource, asset and xa user according to operations performed on Service, policy and users. |
| End Date | Login time and date is stored for each session. A date range is used to filter the results for that particular date range. |
| Session ID | The session count increments each time you try to login to the system |
| Start Date | Login time and date is stored for each session. A date range is used to filter the results for that particular date range. |
| User | Username who has performed create,update,delete operation. |

Managing Auditing in Ranger: Login Sessions

In Ranger, the Login Sessions tab logs the information related to the sessions for each login.

Table 3: Search Criteria

| Search Criteria | Description |
|----------------------|--|
| Login ID | The username through which someone logs in to the system. |
| Session-id | The session count increments each time the user tries to log into the system. |
| Start Date, End Date | Specifies that results should be filtered based on a particular start date and end date. |
| Login Type | The mode through which the user tries to login (by entering username and password). |
| IP | The IP address of the system through which the user logged in. |
| User Agent | The browser or library version used to login for the specific event (e.g. Mozilla, Java, Python) |
| Result | Logs whether or not the login was successful. Possible results can be Success, Wrong Password, Account Disabled, Locked, Password Expired or User Not Found. |

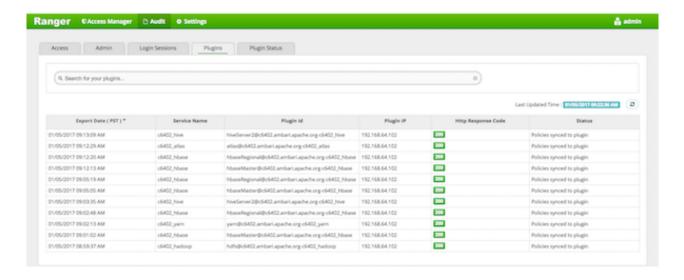


Managing Auditing in Ranger: Plugins

In Ranger, the Plugins tab shows the upload history of the Security Agents. This module displays all of the services exported from the system.

Table 4: Agents Search Criteria

| Search Criteria | Description |
|----------------------|---|
| Plugin IP | IP Address of the agent that tried to export the service. |
| Plugin ID | Name of the agent that tried to export the service. |
| HTTP Response Code | The HTTP code returned when trying to export the service. |
| Start Date, End Date | Export time and date is stored for each agent. A date range is used to filter the results for that particular date range. |
| Service Name | The service name we are trying to export. |
| Cluster Name | Cluster name. Can be defined under Ambari>component>Configs>Advanced>ranger-component-audit file, using ranger.plugin.component.ambari.cluster.name=cluster_name. |

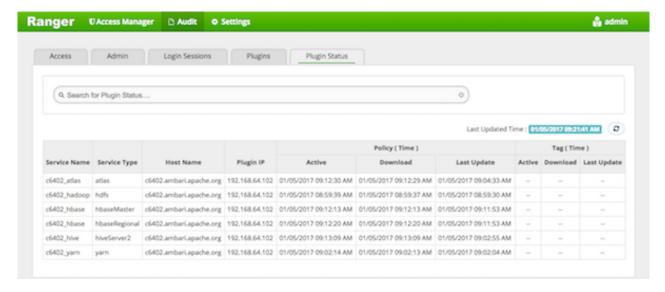


Managing Auditing in Ranger: Plugin Status

In Ranger, the Plugin Status tab shows policies in effect for each plugin. Includes the relevant host info and when the plugin downloaded and started enforcing the policies.

Table 5: Plugin Status Search Criteria

| Search Criteria | Description |
|-----------------|---|
| Host Name | Host, e.g., c6401.ambari.apache.org. |
| Plugin IP | IP Address of the agent that uses the plugin. |
| Service Name | Name of the service that contains the policies, e.g., c6401_yarn. |
| Service Type | Component. |



Managing Auditing in Ranger User Sync

In Ranger, the User Sync page provides service activity data for all usersync processes in Ranger. This creates a compliance/audit trail for users and groups synchronized with each run of userync.

Table 6: Search Criteria

| Search Criteria | Description |
|----------------------|--|
| Start Date, End Date | Filters results for a particular date range. |
| User Name | Name of the user which tried to access the resource. |
| Sync Source | File, LDAP/AD, or Unix. |