

PROCESS MANUAL

Document Code: PM-SNI

ServiceNow Integration

VERSION 1.1.6

 **Admin By Request**
By FastTrack Software

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Introduction

Admin By Request offers a custom-built, fully integrated ServiceNow application for customers who prefer to manage core features of Admin By Request via the ServiceNow platform, rather than through the Admin By Request User Portal. This manual provides a step-by-step guide on how to authorize and enable the integration and access the Requests and Auditlog features through ServiceNow.

Assumptions

The tasks described in this manual assume that the user has administrator access to their ServiceNow instance and some familiarity with the platform.

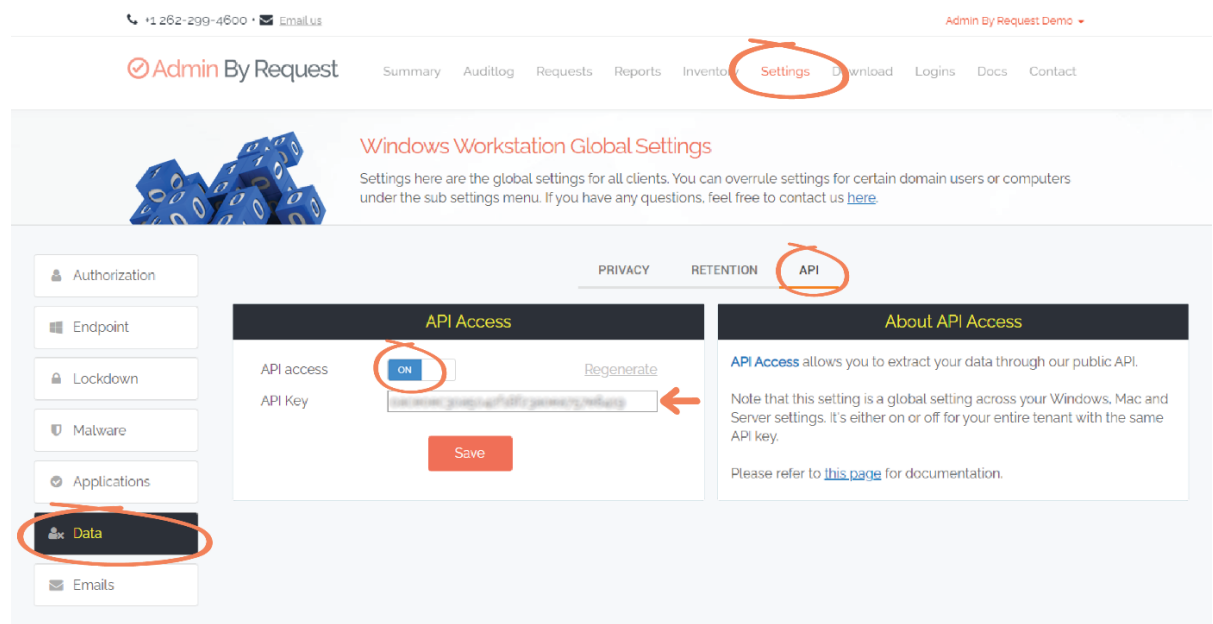
This manual assumes the user is installing the ServiceNow application from scratch (i.e., not upgrading to a new version of the app).


IMPORTANT: If the user is upgrading from version 1.1.5 to 1.1.6, extra steps need to be taken in addition to those listed in the upcoming Tasks of this manual:

- The extra flows will not be automatically deleted upon upgrading, so the user must manually delete those not listed in Task C or uninstall the app and reinstall the new version. This is not an issue for first-time installers.
- Upon upgrading, the user must go into Properties in the app and input the API Key again (see Task B).

Prerequisites

To enable this integration, you must first obtain your Admin By Request API Key. This key can be self-generated through your Admin By Request User Portal via **Settings > [OS] Settings > Data > API**:



 **IMPORTANT:** Click the **Save** button after Regenerating an API Key, to ensure this is the key used to establish the connection to ServiceNow. A green tick icon will appear next to the **Save** button when the action is complete:



 **NOTE:** The API Key has been blurred out in the above example.

Breakdown of Tasks

Five tasks are covered in this manual:

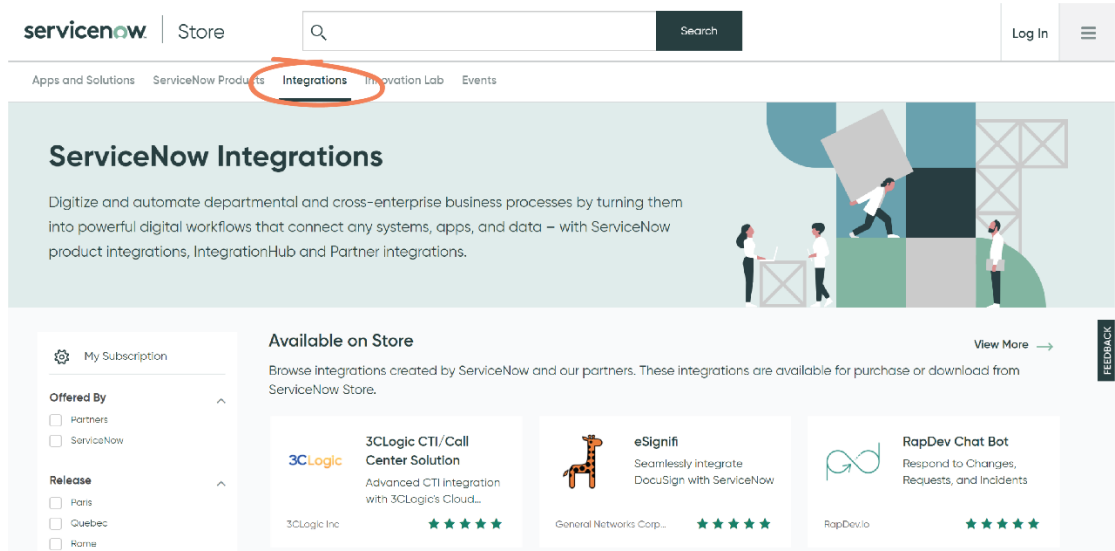
1. Task A: Install Integration
2. Task B: Authorize Connection
3. Task C: Configure Flow
4. Task D: Assign User Access
5. Task E: Use Features

Integration Tasks

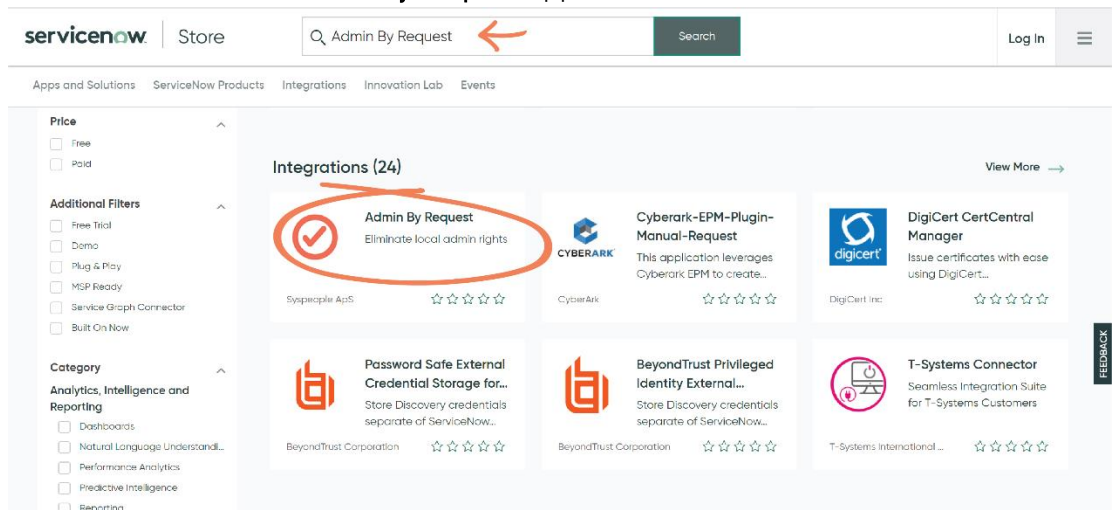
Task A: Install Integration

The integration described in this document is made possible through a connection between ServiceNow and Admin By Request via a custom-built ServiceNow application. The first Task involves installing the app in ServiceNow.

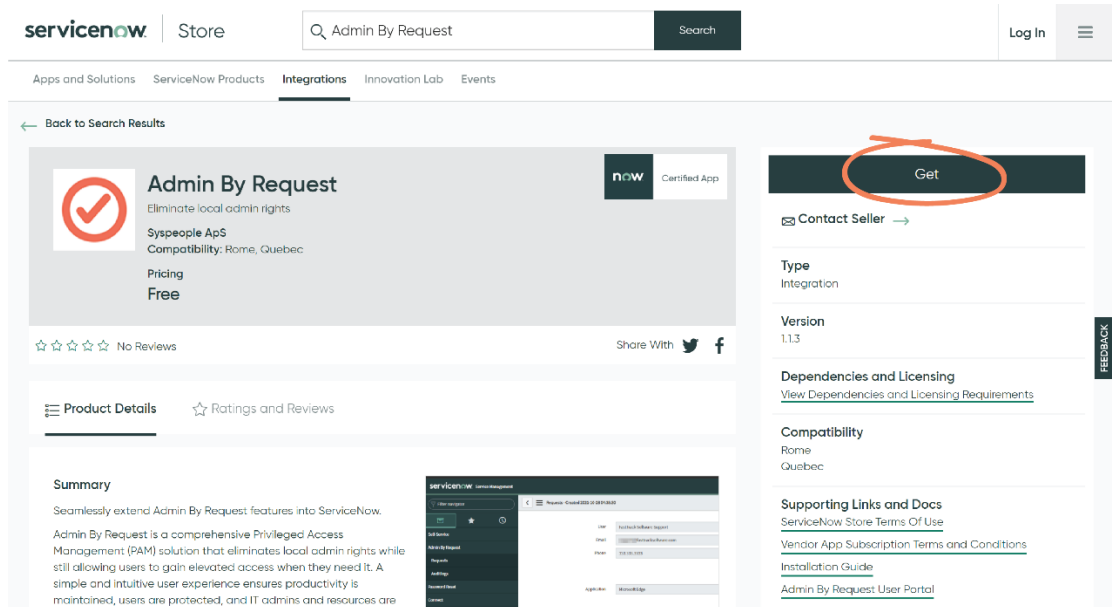
1. Go to the ServiceNow Store, and select **Integrations** from the top menu:



2. Use the search box to search for *Admin By Request*. Scroll down to the **Integrations** section, and select the **Admin By Request** app:



3. In the Admin By Request app page, select the **Get** button on the right-hand side:

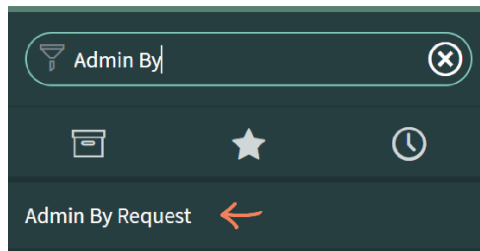
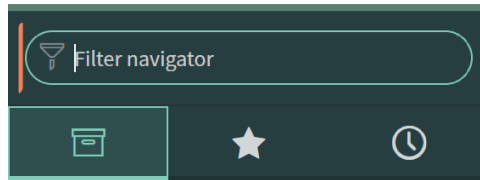


4. Follow the instructions on the screen to install the app in your ServiceNow instance.

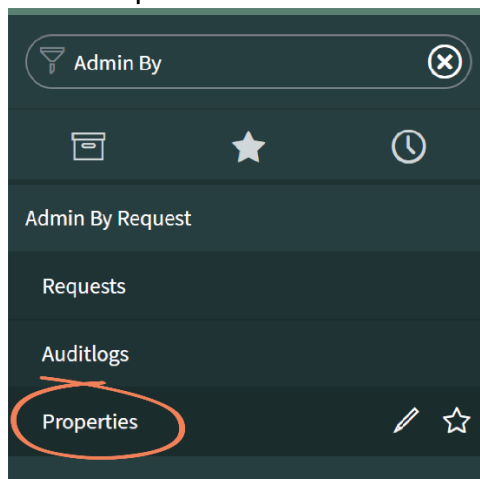
Task B: Authorize Connection

Data-sharing from your Admin By Request User Portal to ServiceNow requires a connection between the ServiceNow application and the Admin By Request public API. Task B of the integration process involves authorizing this connection.

- Using the **Filter Navigator** search box, locate the **Admin By Request** app in your ServiceNow instance:



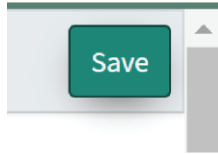
- Select **Properties** from the sub-menu:



- In the ABR Properties page, paste your API key into the **API Key** text box:

A screenshot of the ABR Properties page. The page has a header "ABR Properties". Below the header is the section "Connection properties". Under "Connection properties" is the label "API Key" followed by a question mark icon. Below the label is a text input field containing a series of dots. Below the input field is the label "Select the datacenter that you have been assigned." followed by a question mark icon. Below the label is a dropdown menu with the text "EU" and a downward arrow icon.

8. Click **Save**:



NOTE: The other eight fields on the page are automatically filled out based on data pulled from your tenant when the API connection is established:

The screenshot shows the 'Admin By Request' configuration page in ServiceNow. The left sidebar contains navigation links: 'Admin By Request', 'Requests', 'Auditlogs', 'Properties', and 'Contact Support'. The main content area is titled 'ABR Properties' and includes the following sections:

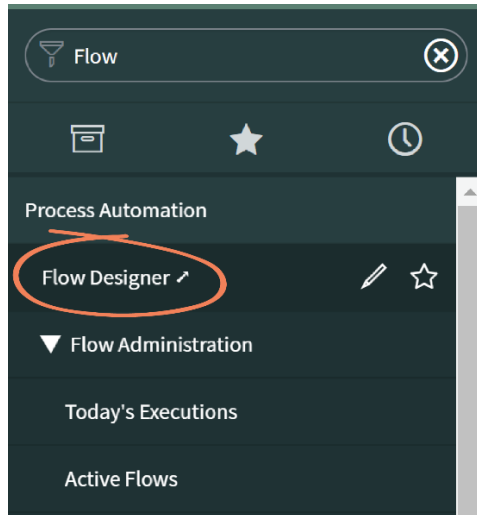
- Connection properties:**
 - ABR API Key:** A text field containing a masked key (represented by dots).
 - Version of the ABR API in ServiceNow:** A text field containing '1.1.6'.
 - After the API Key have been added the region is automatically configured:** A dropdown menu set to 'EU'.
- Licensing information:**
 - Tenant name:** A text field containing 'Test'.
 - Workstation seats:** A text field containing '0'.
 - Workstation usage:** A text field containing '0'.
 - Workstation license expiration:** An empty text field.
 - Server seats:** A text field containing '0'.
 - Server usage:** A text field containing '0'.
 - Server license expiration:** An empty text field.

A green 'Save' button is located at the bottom of the form.

Task C: Configure Flow

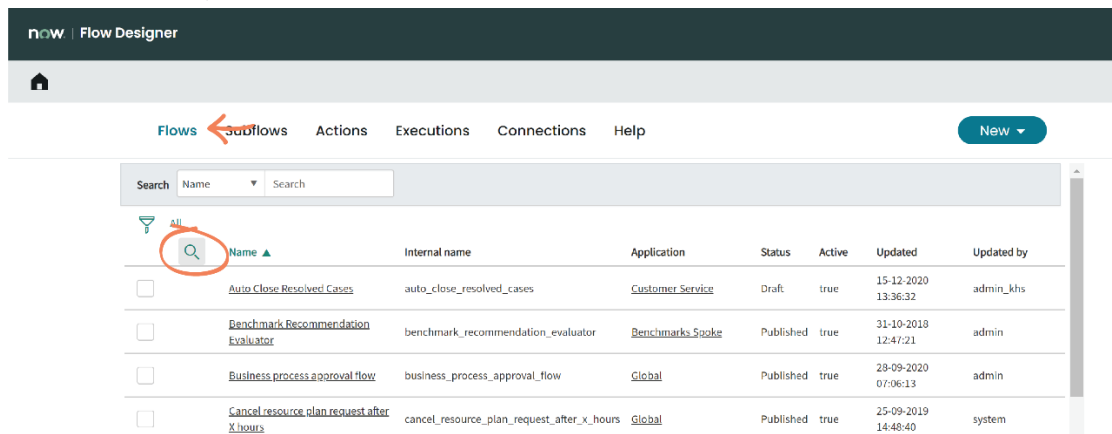
The Admin By Request / ServiceNow integration incorporates a pre-built Flow (also referred to as Schedules in ServiceNow) designed to automatically get Admin By Request data into your ServiceNow instance. This task covers the steps involved in enabling the Flow to run so that the application can begin pulling the appropriate data.

1. Using the **Filter Navigator** search box, locate and select **Flow Designer**:

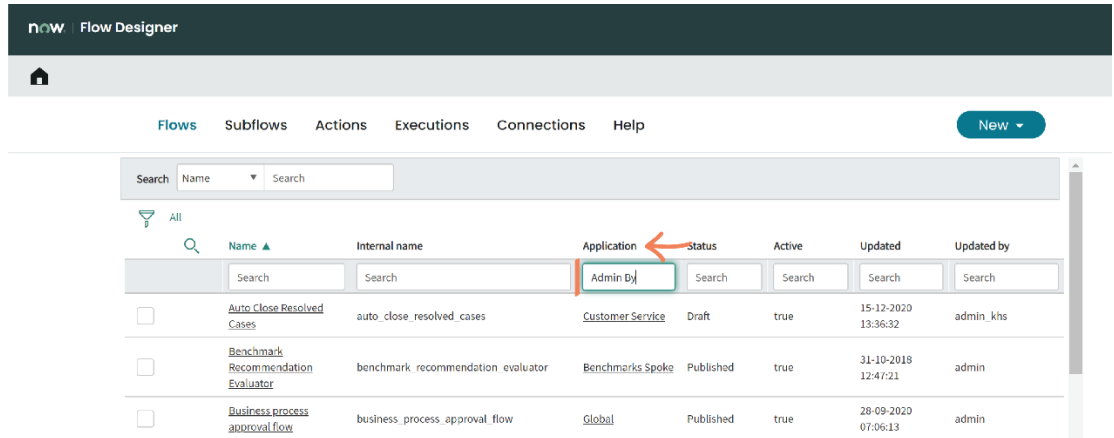


NOTE: The Flow Designer opens in a new window and may take some time to load.

2. In the **Flows** tab, click the search icon underneath the main search menu:



- Use the **Application** search box to locate the Admin By Request Flow:

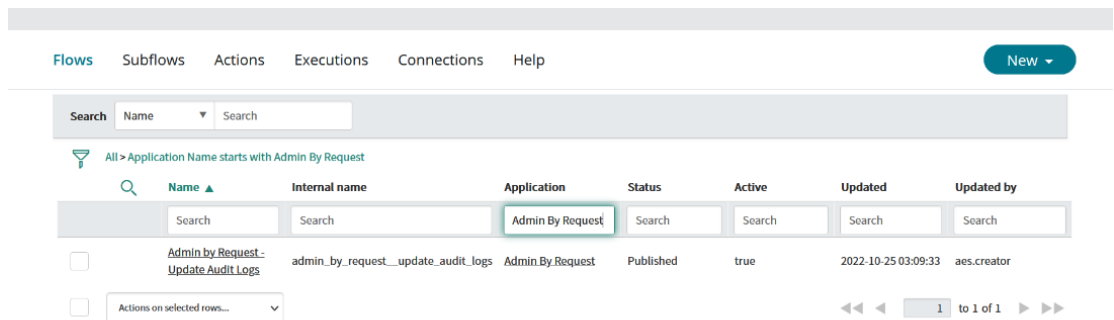


The screenshot shows the ServiceNow Flow Designer interface. At the top, there's a navigation bar with 'Flows', 'Subflows', 'Actions', 'Executions', 'Connections', and 'Help'. Below this is a search bar. The main area displays a table of flows. The 'Application' column is highlighted with a red box, and an arrow points to the 'Admin By Request' value in that column. The table has columns: Name, Internal name, Application, Status, Active, Updated, and Updated by.

Name	Internal name	Application	Status	Active	Updated	Updated by
Auto Close Resolved Cases	auto_close_resolved_cases	Customer Service	Draft	true	15-12-2020 13:36:32	admin_khs
Benchmark Recommendation Evaluator	benchmark_recommendation_evaluator	Benchmarks Spoke	Published	true	31-10-2018 12:47:21	admin
Business process approval flow	business_process_approval_flow	Global	Published	true	28-09-2020 07:06:13	admin

- The following Flow is displayed for the Admin By Request application:

- Admin By Request – Update Audit Logs*

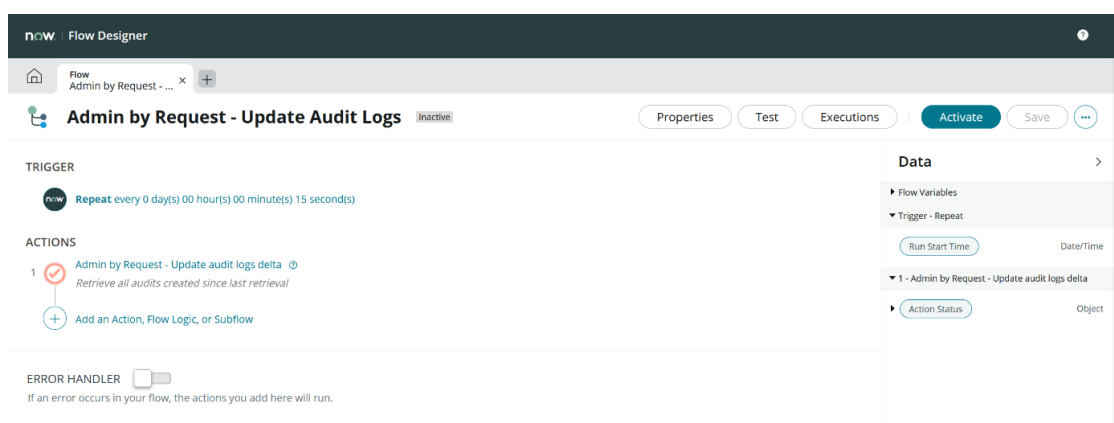


The screenshot shows the ServiceNow Flow Designer interface with the 'Admin by Request - Update Audit Logs' flow selected. The 'Application' column is highlighted with a red box, and the 'Admin By Request' value is visible. The table has columns: Name, Internal name, Application, Status, Active, Updated, and Updated by.

Name	Internal name	Application	Status	Active	Updated	Updated by
Admin by Request - Update Audit Logs	admin_by_request_update_audit_logs	Admin By Request	Published	true	2022-10-25 03:09:33	aes.creator

- Click into the flow by selecting its name in the **Name** column. This opens the following screen, displaying the sections detailed below:

- TRIGGER:** Specifies if and how often the Flow is repeated.
- ACTIONS:** Lists the actions performed in the Flow.



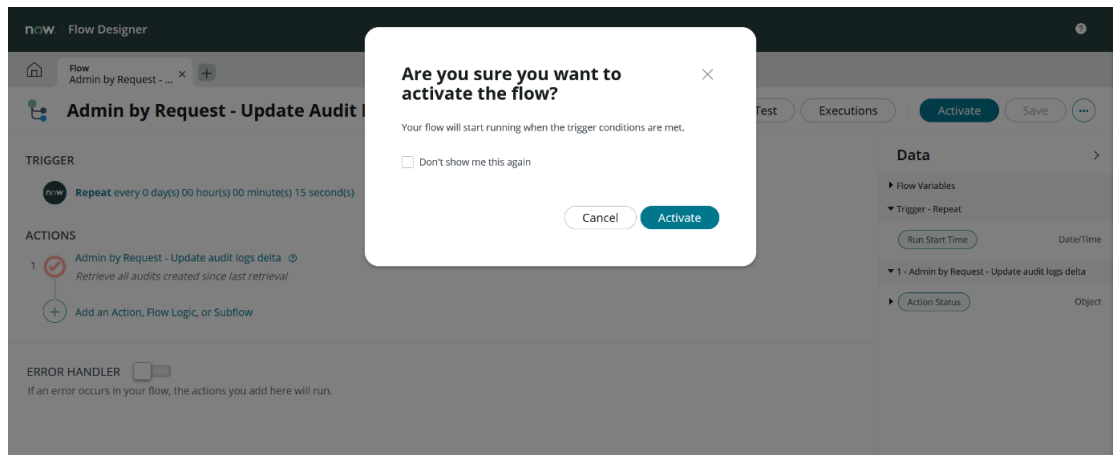
The screenshot shows the ServiceNow Flow Designer interface for the 'Admin by Request - Update Audit Logs' flow. The flow is currently inactive. The configuration is as follows:

- TRIGGER:** Repeat every 0 day(s) 00 hour(s) 00 minute(s) 15 second(s)
- ACTIONS:**
 - 1. Admin by Request - Update audit logs delta (Retrieve all audits created since last retrieval)
 - Add an Action, Flow Logic, or Subflow
- ERROR HANDLER:** If an error occurs in your flow, the actions you add here will run.

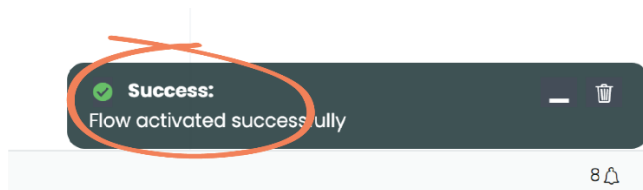
The right-hand menu shows the 'Data' section with 'Flow Variables' and 'Trigger - Repeat'.

- Click the **Activate** button in the top right-hand menu.

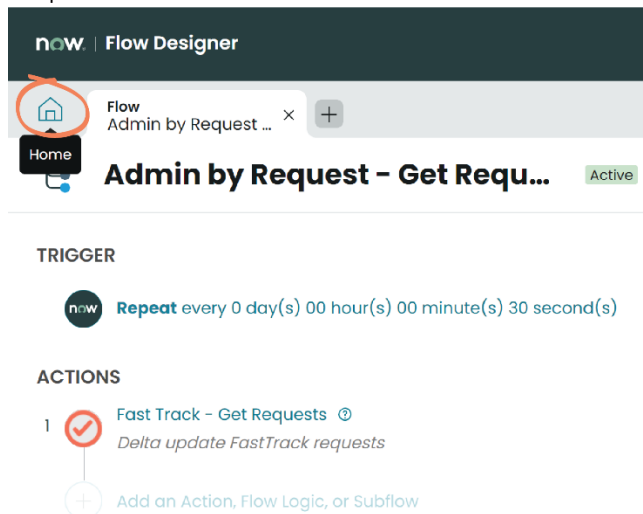
7. This opens a confirmation prompt. Click the **Activate** button in the prompt to enable the flow to run:



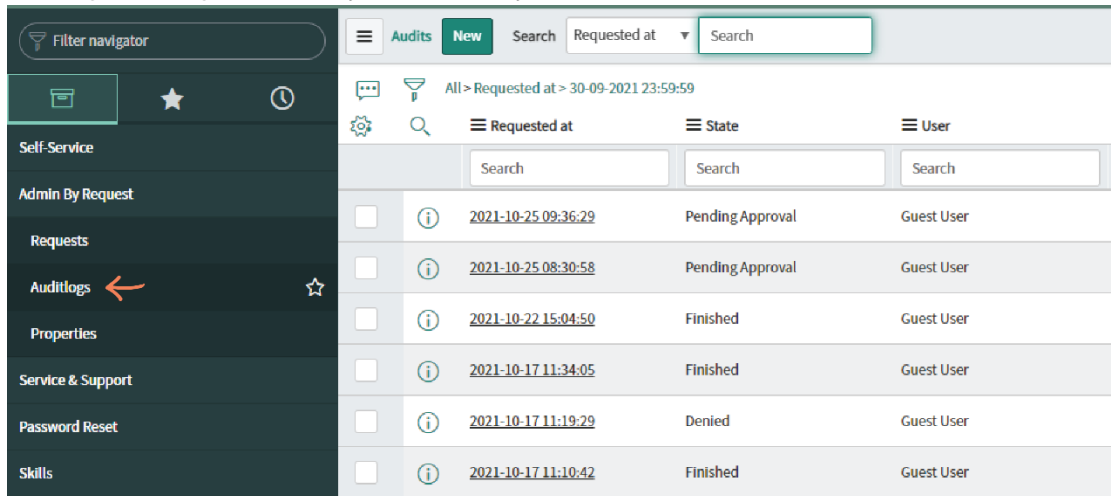
8. Upon successful activation, a **Success** message appears in the bottom right-hand corner of the screen:



9. Use the **Home** icon next to the **Flow** tab in the top left-hand menu to navigate back to Step 1 of this task (i.e., Task C):



10. To test successful connection (Task B) and Flow Configuration (Task C), navigate to the Admin By Request Auditlog page in the ServiceNow app; listed here should be the existing Auditlog data from your Admin By Request User Portal:



	Requested at	State	User
<input type="checkbox"/>	2021-10-25 09:36:29	Pending Approval	Guest User
<input type="checkbox"/>	2021-10-25 08:30:58	Pending Approval	Guest User
<input type="checkbox"/>	2021-10-22 15:04:50	Finished	Guest User
<input type="checkbox"/>	2021-10-17 11:34:05	Finished	Guest User
<input type="checkbox"/>	2021-10-17 11:19:29	Denied	Guest User
<input type="checkbox"/>	2021-10-17 11:10:42	Finished	Guest User

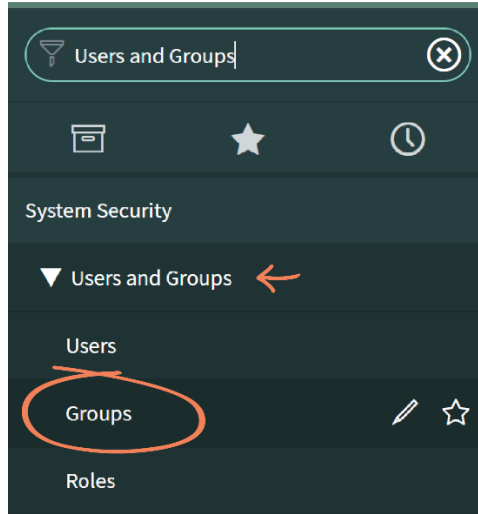
IMPORTANT: This assumes that you have existing Auditlog data in your Admin By Request User Portal to be pulled through to ServiceNow.

Task D: Assign User Access

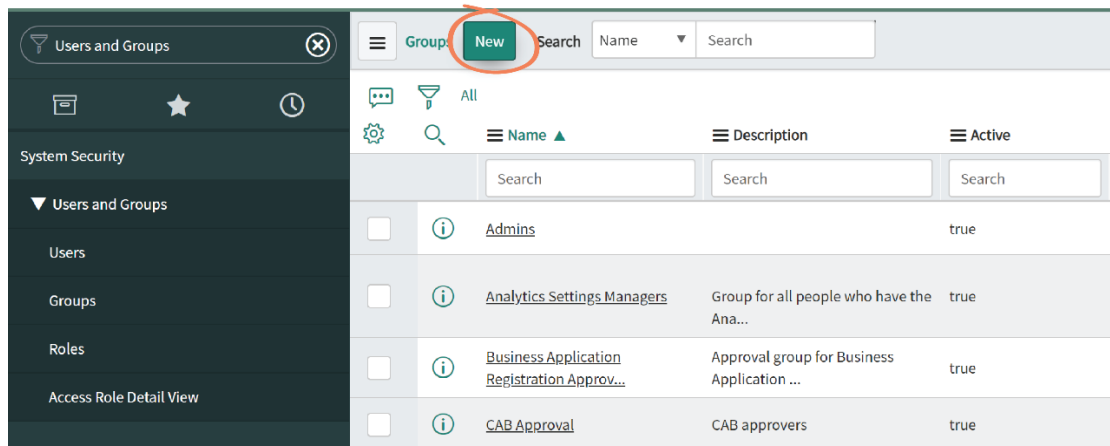
Once the Flow is activated and the application is successfully pulling / updating data, access needs to be granted to the appropriate users within the ServiceNow instance so that they can interact with Admin By Request features. This task covers the process of creating a Group of users and assigning them access using pre-configured ServiceNow Roles.

In this example, we assign an *Example Approvers* Group the Role of *User*, which allows them to Approve or Deny Requests within ServiceNow.

1. Using the **Filter Navigator** search box, locate and select **Groups** (under **Users and Groups**):



2. Click the **New** button in the top left-hand menu:



3. Fill out the fields as appropriate (i.e., according to your organizations preferences) and click **Submit**:

Group
New record

Name: Example Approvers

Manager: [Search]

Hourly rate: kr 0,00

Description: These users are able to Approve or Deny Requests.

Type: [Icon]

Submit

NOTE: In the above example, only the Name and Description fields are filled out.

4. Search by **Name** in the top search bar to locate and select the **Example Approvers** Group created in the previous step (i.e., Step 3):

Groups New Search Name Example Approvers

All > Name >= Example Approvers

	Name	Description	Active	Manager	Parent
<input type="checkbox"/>	<u>Example Approvers</u>	These users are able to Approve or Deny ...	true	(empty)	(empty)
<input type="checkbox"/>	<u>Fast Track Approvers</u>		true	(empty)	(empty)
<input type="checkbox"/>	<u>Inbox</u>	Syspeople Inbox	true	<u>Jesper Andersen</u>	(empty)
<input type="checkbox"/>	<u>LDAP Admins</u>	LDAP admins group	true	(empty)	(empty)

5. In the **Roles** tab in the bottom left-hand menu, click the **Edit...** button:

The screenshot shows the 'Example Approvers' group configuration page. The 'Roles' tab is selected in the bottom left-hand menu, and the 'Edit...' button is circled in red. The page displays fields for Name (Example Approvers), Manager, Hourly rate (kr 0,00), Description (These users are able to Approve or Deny Requests), and Type. There are also buttons for Update and Delete. Below the form, there is a 'Related Links' section with a link to 'Add to Update Set'. The bottom section shows a table with columns: Role, Created, Granted by, and Inherits. The table is currently empty, displaying 'No records to display'.

6. Use the **Collection** search box to locate the two pre-configured Roles for this application:

- ***x_syaps_abr.abr_admin***: Users assigned this role have administrative access within the application, which includes the ability to access all application features (Requests, Auditlog) and the Properties page.
- ***x_syaps_abr.abr_user***: These users are able to access and interact with the Admin By Request Auditlog and Requests features (i.e., view / manage Auditlog data and Approve or Deny Requests).

The screenshot shows the 'Collection' search box and the 'Roles List' table. The 'Collection' search box is highlighted with a red arrow, and the 'Roles List' table shows the two pre-configured roles: ***x_syaps_abr.abr_admin*** and ***x_syaps_abr.abr_user***. The 'Roles List' table has a column for 'Example Approvers' and a row for '--None--'. There are buttons for 'Add Filter', 'Run filter', 'Cancel', and 'Save'.

7. Select the **User** Role (i.e., `x_syaps_abr.abr_user`) and click the right-facing **arrow** button to assign the Role to the *Example Approvers* Group:

Collection

Roles List

Example Approvers

Cancel Save

Name x_syaps_abr.abr_user

8. The Role appears under the Group name in the right-hand field. Click **Save**:

Collection

Roles List

Example Approvers

Cancel Save

Name x_syaps_abr.abr_user

9. Users can now be added to the Group in the same process used to assign Roles. Return to the Group page, and use the **Edit...** button in the **Group Members** tab:

Roles Group Members Groups Skills

Group Members Edit... Search User Search

Group = Example Approvers

User

No records to display


10. Use the **Collection** search box to locate the users for the Group, and the right-facing **arrow** button to add them to the *Example Approvers* Group.



NOTE: Roles can also be assigned to individual users. Navigate to **Users** from the **Filter Navigator** search box (under **Users and Groups**) and follow a similar process to what is described in this Task (i.e., Task D) to assign the appropriate Role to the user.

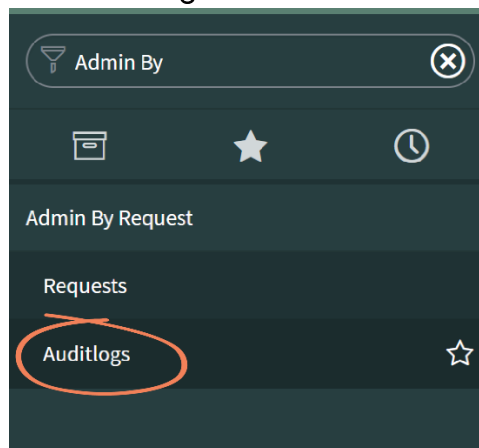
Task E: Use Features

Once the correct Roles are assigned, users are able to access Admin By Request data through the integrated features: Auditlog and Requests. Task E covers how to use these features within the ServiceNow application.

 **NOTE:** This Task is demonstrated from the viewpoint of regular user in the ServiceNow instance (i.e., a member of the *Example Approvers* Group assigned the Role of *User* in Task D) as opposed to an administrator (the Role required for Tasks A through D).


Auditlog

- Using the **Filter Navigator** search box, locate the **Admin By Request** app and select **Auditlog** from the sub-menu:



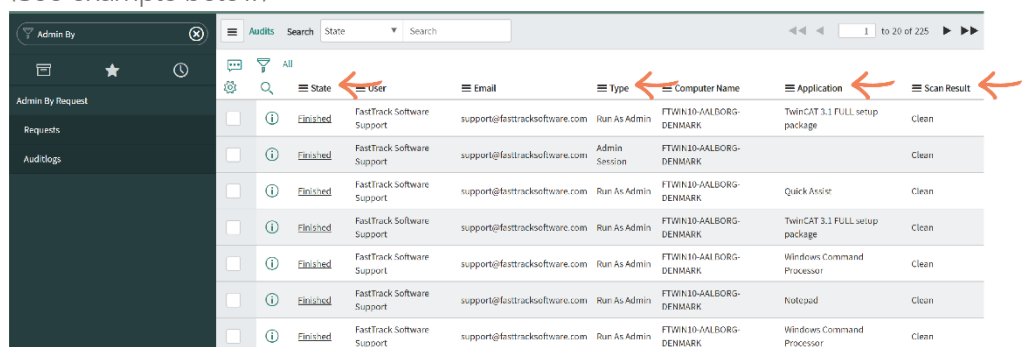
- The Auditlog page displays all of the recent Auditlog data from Run As Admin and Admin Session Requests. Information includes:

- State*: This could be 'Pending Approval', 'Denied', 'Open', or 'Finished'.
- Type*: Either 'Run As Admin' or 'Admin Session'.
- Application*: The application that the user requested to Run As Admin.

 **NOTE:** There are no applications listed in this column for Admin Sessions because multiple applications may have been accessed during this time.

- Scan Result*: This column displays 'Clean' unless the VirusTotal scan has flagged malware.

(See example below)



State	User	Email	Type	Computer Name	Application	Scan Result
Finished	support@fasttracksoftware.com	support@fasttracksoftware.com	Run As Admin	FTWIN10-AALBORG-DENMARK	TwincAT 3.1 FULL setup package	Clean
Finished	support@fasttracksoftware.com	support@fasttracksoftware.com	Admin Session	FTWIN10-AALBORG-DENMARK		Clean
Finished	support@fasttracksoftware.com	support@fasttracksoftware.com	Run As Admin	FTWIN10-AALBORG-DENMARK	Quick Assist	Clean
Finished	support@fasttracksoftware.com	support@fasttracksoftware.com	Run As Admin	FTWIN10-AALBORG-DENMARK	TwincAT 3.1 FULL setup package	Clean
Finished	support@fasttracksoftware.com	support@fasttracksoftware.com	Run As Admin	FTWIN10-AALBORG-DENMARK	Windows Command Processor	Clean
Finished	support@fasttracksoftware.com	support@fasttracksoftware.com	Run As Admin	FTWIN10-AALBORG-DENMARK	Notepad	Clean
Finished	support@fasttracksoftware.com	support@fasttracksoftware.com	Run As Admin	FTWIN10-AALBORG-DENMARK	Windows Command Processor	Clean

3. Select an item in the list using the **State** column to view the available data for that Auditlog entry. Available data may include some or all of the following:

Audit - FastTrack Software Support

User	FastTrack Software Support	Type	Run As Admin
Email	support@fasttracksoftware.com	State	Finished
Phone			
Application	TwinCAT 3.1 FULL setup package	Scan Result	Clean
Preapproved	<input type="checkbox"/>	Virus Total	https://www.virustotal.com/latest-scan/4D3EC90494D7A0BE31CEB7E8FB2BEEBA90F33A992089BBE8BE2E7FCA32F9DC2
Reason			
Denied Reason			
Requested at	29-07-2021 13:42:58	Start Time	
Response Time		End Time	

Audit Log Activities Search Activity Search 1 to 4 of 4

	Activity	Application Name	Path
<input type="checkbox"/>	Elevated Privilege	Beckhoff TwinCAT 3.1 (Build 4024)	C:\Users\FastTrackSoftwareSup\AppData\Lo...
<input type="checkbox"/>	Elevated Privilege	Windows Command Processor	C:\Windows\SysWOW64\cmd.exe
<input type="checkbox"/>	Elevated Privilege	TwinCAT 3.1 FULL setup package	C:\Users\FastTrackSoftwareSup\Downloads\...
<input type="checkbox"/>	Elevated Privilege	Microsoft Visual Studio 2019	C:\Program Files (x86)\Microsoft Visual ...

☐ Actions on selected rows... 1 to 4 of 4

IMPORTANT: If logged in to your instance as a ServiceNow administrator (not just an application admin), Auditlog data can be edited and updated manually by making the desired changes to an Auditlog entry and clicking the **Update** button (however, editing Auditlog data is not recommended):

Update **Delete**

4. Selecting an item in the **Activity** column (from the **Audit Log Activities** section, bottom of page) displays further information, such as the file path:

Audit Log Activities Search Activity Search 1 to 4 of 4

	Activity	Application Name	Path
<input type="checkbox"/>	Elevated Privilege	Beckhoff TwinCAT 3.1 (Build 4024)	C:\Users\FastTrackSoftwareSup\AppData\Lo...
<input type="checkbox"/>	Elevated Privilege	Windows Command Processor	C:\Windows\SysWOW64\cmd.exe
<input type="checkbox"/>	Elevated Privilege	TwinCAT 3.1 FULL setup package	C:\Users\FastTrackSoftwareSup\Downloads\...
<input type="checkbox"/>	Elevated Privilege	Microsoft Visual Studio 2019	C:\Program Files (x86)\Microsoft Visual ...

☐ Actions on selected rows... 1 to 4 of 4

Audit Log Activity - Created 19-08-2021 12:17:07

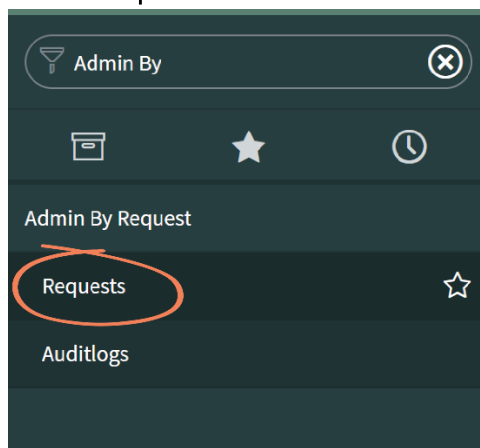
Activity: Elevated Privilege Application Name: Windows Command Processor

Path: C:\Windows\SysWOW64\cmd.exe

Audit Log: FastTrack Software Support

Requests

1. Select **Requests** from the **FastTrack – Admin By Request** sub-menu:



2. The **Requests** page displays all of the Requests made by users that are pending approval:

The screenshot shows the 'Requests' page. The left sidebar has 'Requests' selected. The main area displays a table of requests with columns: State, User, Email, Type, Computer Name, Application, Scan Result, and Updated. Two requests are listed, both with a 'Pending Approval' state. A red circle highlights the 'Pending Approval' state in the first row.

State	User	Email	Type	Computer Name	Application	Scan Result	Updated
Pending Approval	FastTrack Software Support	support@fasttracksoftware.com	Run As Admin	FTWIN10-AALBORG-DENMARK	Windows Notepad	Clean	19-08-2021 13:54:23
Pending Approval	FastTrack Software Support	support@fasttracksoftware.com	Run As Admin	FTWIN10-AALBORG-DENMARK	Microsoft Edge	Clean	19-08-2021 13:54:23

3. Click into an item in the list by selecting **Pending Approval** in the **State** column:

The screenshot shows the 'Requests' page with the 'Pending Approval' state selected in the first row. A red circle highlights the 'Pending Approval' state in the first row. The 'State' column header is also highlighted with a red circle.

State	User	Email	Type	Computer Name	Application	Scan Result	Updated
Pending Approval	FastTrack Software Support	support@fasttracksoftware.com	Run As Admin	FTWIN10-AALBORG-DENMARK	Windows Notepad	Clean	19-08-2021 13:54:23
Pending Approval	FastTrack Software Support	support@fasttracksoftware.com	Run As Admin	FTWIN10-AALBORG-DENMARK	Microsoft Edge	Clean	19-08-2021 13:54:23

4. Information about the Request is displayed. Click the **Approve** button to Approve the Request:

The screenshot shows the 'Request - FastTrack Software Support' form. At the top right, there are 'Approve' (green) and 'Deny' (red) buttons. The form fields include:

- User: FastTrack Software Support
- Email: support@fasttracksoftware.com
- Phone: 333.333.3333
- State: Pending Approval
- Type: Run As Admin

Under the 'Application' section:

- Application: Windows Notepad
- Scan Result: Clean
- Virus Total: <https://www.virustotal.com/latest-scan/DEB5B0067E4AF84BB07FA3D84631CEE94787FB3BE7CDA11C0016992F54A84DDA>
- Reason: notepad test

At the bottom left of the form, the 'Approve' button is circled in red.

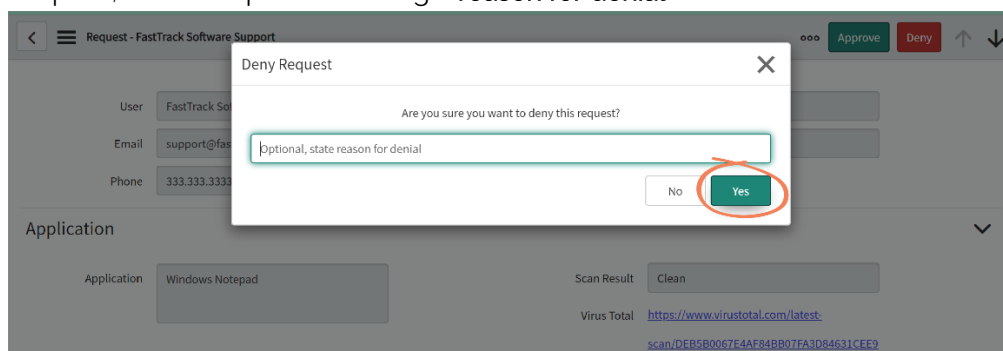


NOTE: The user who made the Request will receive an email from Admin By Request that their Request has been Approved. When the Request is complete, the details will be available in the Auditlog in ServiceNow.

5. To Deny a Request, click into the Request and select the **Deny** button:

The screenshot shows the same 'Request - FastTrack Software Support' form as above. In this instance, the 'Deny' button (red) is circled in red at the bottom left of the form.

6. A confirmation window appears following this action. Click **Yes** to Deny the Request, with the option of stating a **reason for denial**:



The screenshot shows a web application interface with a modal dialog titled "Deny Request". The dialog contains the text "Are you sure you want to deny this request?" and a text input field with the placeholder "Optional, state reason for denial". Below the input field are two buttons: "No" and "Yes". The "Yes" button is highlighted with a red circle. In the background, the application details for "FastTrack Software Support" are visible, including fields for User, Email, Phone, Application (Windows Notepad), Scan Result (Clean), and Virus Total link.



NOTE: The user who made the Request will receive an email that their Request has been denied, with the reason included (if reason was given).

Troubleshooting

Common Issues

1. Failure to Establish API Connection

Regenerate the API Key in your Admin By Request User Portal and ensure you have clicked the **Save** button (the green tick icon appears upon successful save). Replace the API Key in the ServiceNow Properties page and click **Save**. Ensure the "Properties Saved" message appears at the top of the page.

2. No Auditlog or Request Data Coming Through

- Ensure the Flow has been configured correctly (Task C in this manual). Go to the Flow Designer, locate the Admin By Request Flow, and ensure all three are Active. Check that the Trigger is set to a reasonably short interval (i.e., not a long period, e.g., two hours).
- Ensure there is data in your Admin By Request User Portal to be pulled through to ServiceNow. If no data exists in Admin By Request, create some test data by making a and consuming a request on the endpoint.

3. Unable to Access ServiceNow Features

Ensure the account you are signed in to in ServiceNow has the appropriate administrative permissions enabled to access the features required for this integration. (Admin access is required for Tasks A through D.)

Other Issues

For any issues unable to be resolved using the steps above, contact Admin By Request by creating a Support ticket; select the **Email us** button above the logo in the main menu of your Admin By Request user portal:

+1 262-299-4600 • [Email us](#)



For issues unrelated to the Admin By Request application, contact ServiceNow.