



CYBERARK®

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CyberArk EPM ServiceNow Integration

Name of Company: ServiceNow

Website: <https://www.servicenow.com>

Name of Product: ServiceNow

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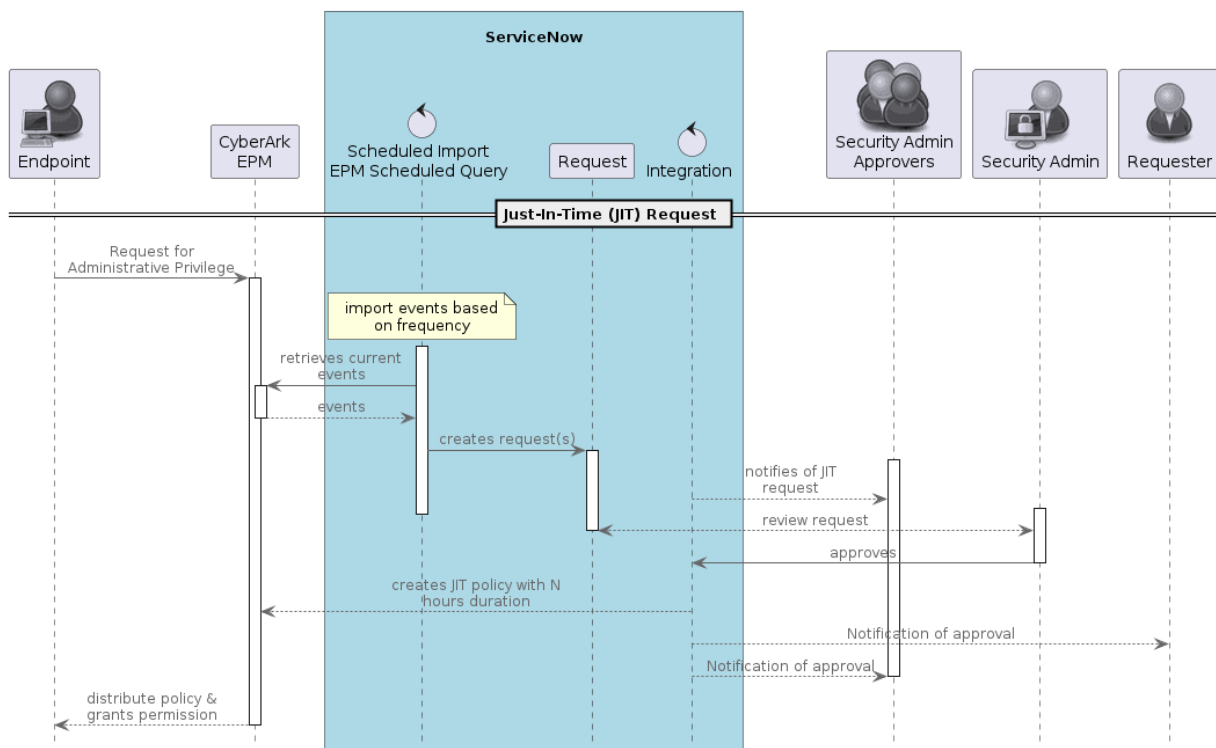
1	<i>SOLUTION OVERVIEW</i>	3
2	<i>INTEGRATION DESCRIPTION AND DIAGRAM</i>	3
3	<i>REQUIREMENTS</i>	4
4	<i>CONFIGURATION</i>	4
4.1	CyberArk EPM Settings (Configuration)	4
	General Settings	4
	JIT Access Settings	6
	Ticketing Settings	6
4.2	Scheduled Import -- Legacy	6
4.3	Scheduled Import (Async)	6
5	<i>How to use the integration</i>	7
	Requester (Requested for) Match	8
	Approvers List	8
	Manual Requests (JIT Access)	8
	Approval based on existing ticket	9
	ServiceNow Manual Request	9
	Notifications	9
	Error Notifications	10
6	<i>TROUBLESHOOTING</i>	12
7	<i>PARTNER CONTACT INFO</i>	13

1 SOLUTION OVERVIEW

The CyberArk EPM Plugin enables seamless management of Manual JIT Access and Elevation Requests within the ServiceNow Platform. This integration manages the full life cycle of an EPM event inside ServiceNow. At regular intervals, EPM is queried, and for each EPM request that occurred during that time interval, a request is created inside ServiceNow. This provides detailed information on the request, such as the source computer and justification for the request. The purpose is the integration is to allow for policy optimization and creation while leveraging ServiceNow for the Approval Workflow.

2 INTEGRATION DESCRIPTION AND DIAGRAM

The CyberArk EPM Plugin allows for the management of JIT Access and Elevation Requests in the ServiceNow Platform. The full life cycle of the an EPM event is managed inside of ServiceNow. On a timed interval, EPM will be queried and for each supported request that occurred in the time interval a Request will be created inside of ServiceNow. This will provide information on the request such as the source computer, User and justification for the request.



For Manual Request - Upon approval, a Just In time policy will be created and the user will get administrator rights for 1 hour (or the default defined by customer setting, or the time selected by approver).

3 REQUIREMENTS

ServiceNow Requirements

- ServiceNow Xanadu, Yokohama, Zurich

CyberArk Requirements

- Active Endpoint Protection Manager (EPM) SaaS account
- Having a mature and steady environment where policies are already in place. This integration is designed to support exception EPM events management. otherwise, SNOW might be flooded with tickets.

4 CONFIGURATION

Once the Application is downloaded and inside of ServiceNow, the following tables will be created:

- CyberArk EPM Metadata: This table holds data needed when creating a JIT policy. No configuration needed, only used for metadata storage
- CyberArk EPM Import Policies: Staging table to stores Application and Application Group Policies (Policy Id and Name) from EPM. This table gets refreshed by default every 24 hours with the “CyberArk EPM Refresh Policies” scheduled import.
- CyberArk EPM Import Table: Staging table to hold data retrieved from EPM during the ‘CyberArk EPM Scheduled Query’ scheduled data import.
- CyberArk EPM Reference Policies: Table for Application and Application Group Policies.
- CyberArk EPM Settings: Table for configuration of the integration.
- CyberArk EPM Tenant Data: Table to store the EPM Sets defined.
- CyberArk EPM Request Table: Table containing the requests from EPM
- CyberArk Settings: Core table extended by CyberArk EPM Settings table
- For more information/Download, please refer to the ServiceNow Store

4.1 CyberArk EPM Settings (Configuration)

The following system configuration parameters define the behavior of the integration.

General Settings

- **Use ISPSS OAUTH:** To define whether the integration uses CyberArk EPM Basic Authentication or CyberArk Identity Security Platform Shared Services (ISPSS) OAUTH2.
 - **If checked (default for new installations),** please select the OAUTH Entity Profile (previously created, see below for instructions, and enter the URL to obtain the tenant (something usually like <https://api-<region>.epm.cyberark.cloud/epm/api/accounts/tenanturl>)

General Settings
Created 2024-11-18 09:16:14

Use ISPS OAUTH ☒

* OAUTH Entity Profile CyberArk ISPS API OAUTH default_profile

* ISPS EPM Tenant URL https://api-na.epm.cyberark.cloud/epm/api/accounts/tenanturl

Enabled EPM Sets Ed-BizDev01(saascorps bizdevtech2)

Last Run 2026-03-18 13:20:00

API Timeout (Seconds) 30

Level of Managerial Hierarchy in approvers 0

Update CyberArk EPM Retrieve Sets Delete

- **Create the Application Registry (The "Provider")**

Before you can have a profile, you must define the provider.

1. Navigate to System **OAuth > Application Registry**.
2. Click **New** and select **Connect to a third party OAuth Provider**.
3. Fill in the **Name**, **Client ID**, **Client Secret**, and **Token URL**.
4. **Submit** the record.

- **If not checked**, then define the properties for EPM basic authentication.

General Settings
Created 2024-11-18 09:16:14

Use ISPS OAUTH ☐

* EPM Login URL https://login.epm.cyberark.com

* EPM API Username simon.liang@cyberark.com

* EPM API Password *****

Enabled EPM Sets Ed-BizDev01(saascorps bizdevtech2)

Last Run 2026-03-18 13:20:00

API Timeout (Seconds) 30

Level of Managerial Hierarchy in approvers 0

Update CyberArk EPM Retrieve Sets Delete

- **EPM Login URL**

Base URL for the EPM Instance (required), for example: https://login.epm.cyberark.com

- **EPM API Username**

Username of the EPM User (required) for the REST API calls done by the integration. This EPM user should be a set administrator with full access to all sets defined in EPM enabled sets.

- **EPM API Password**

Password for the EPM user (required).

- **Enabled EPM Sets**

The EPM Sets considered by the integration. This parameter defines the sets that will be included in the retrieval of EPM events.

- **Last Run**

Used for internal purposes, keeps track of the last time an import was run. The CyberArk EPM Scheduled Query will retrieve only events that have arrived after the last run. You can clear it, to retrieve all events.

- **API Timeout (Seconds)**

The internal timeout used by EPM REST API calls.

- **Level of Managerial Hierarchy in approvers**

The number of levels up in the hierarchy for manager(s) to be considered for the approvers list. For example, a value of 1 means the immediate manager, 2 to include the immediate manager's manager as well, and so on.

JIT Access Settings

- **Enable Just In Time Requests**
Whether the integration should handle EPM Just In Time (JIT) requests.
- **Default duration for policy (Hours)**
The default duration for Just In Time policies, in hours.
- **Kill running Apps after policy expires**
Indicates whether administrative processes will be terminated when the policy expires
- **Enable approval based on existing ticket**
Whether the Just In Time requests will be auto approved based on validation of the ticket entered.

Ticketing Settings

- **Enable Ticketing Parsing**
Allows parsing a ticket number in the justification when making the request, the ticket number will be extracted from the justification and place as ticket number in the request. The ticket should be the first information provided in the justification text.
- **Ticket Prefix**
Accepted and recognized prefix(es) for ServiceNow tickets. Multiple prefixes can be defined by separating them with a pipe character (|). Currently supported prefixes for parsing are: INC and CHG.

4.2 Scheduled Import -- Legacy

This integration uses a scheduled data import to retrieve events from CyberArk EPM:

- **CyberArk EPM Scheduled Query:** It imports metadata for EPM requests and exposes them in ServiceNow. It imports the following:
 - Just In Time requests: These are retrieved by using EPM's "[Get detailed raw events](#)" Rest API

This data import can be configured to execute periodically. The recommended frequency is 1 hour, and it should not be set to a frequency less than 5 minutes as it will execute many queries against EPM and performance may be impacted.

Note: with the introduction of Scheduled Import (Async), please see next section, this scheduled import should not be active in preference of the Async method. Only one of the 2 imports should be active at a time. In future versions, this option will be removed. Both imports should create the same results of importing events from CyberArk EPM, the one labeled with Async is the recommended way by ServiceNow to bring that information in asynchronous mode without major impact to performance in general.

4.3 Scheduled Import (Async)

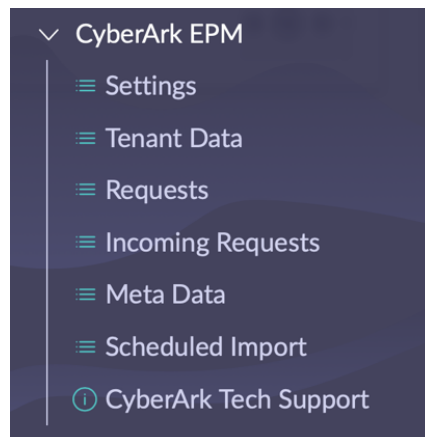
This integration uses a scheduled script execution to retrieve events from CyberArk EPM:

- **CyberArk EPM Scheduled Query (Async):** It imports metadata for EPM requests and exposes them in ServiceNow. It imports the following:
 - Just In Time requests: These are retrieved by using EPM's "[Get detailed raw events](#)" Rest API

This scheduled script execution can be configured to execute periodically. The recommended frequency is 1 hour, and it should not be set to a frequency less than 5 minutes as it will execute many queries against EPM and performance may be impacted.

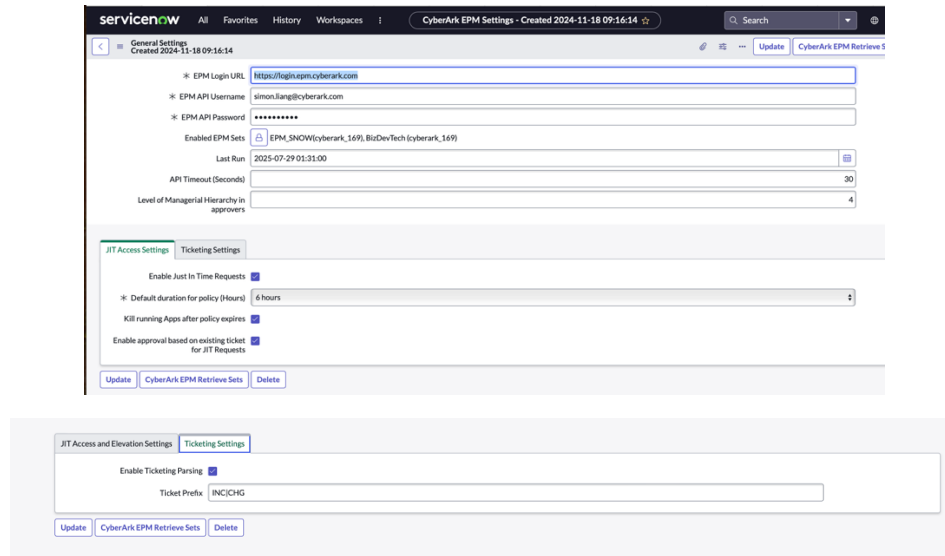
5 How to use the integration

In ServiceNow, a menu option (**CyberArk EPM**) is created for the Application. The menu looks as follow:



Menu Items:

- **Settings:** Option to configure the integration, please see section “[CyberArk EPM Settings \(Configuration\)](#)” for explanation of different parameters
- **Tenant Data:** For internal use, here are the sets and the sets id defined in EPM server to be used by configuration page to select which sets will be processed by the integration
- **Requests:** This is where you can see, edit requests. Only users in the approvers_list field of each request can approve or reject them
- **Incoming Requests:** This is where you can see, edit requests where you are in the approvers_list field. Only users in the approvers_list field of each request can approve or reject them
- **Meta Data:** For internal user, this is a table used to store metadata for creating policies, this can be useful for trouble shooting purposes
- **Scheduled Import:** Option to view, and configure scheduled import(s) delivered by the application. Please, see section “[Scheduled Data Import](#)” for details.
- **Scheduled Import (Async):** Option to view and configure the scheduled script execution delivered by the application. Please, see section “[Scheduled Data Import \(Async\)](#)” for details.
- **CyberArk Tech Support:** It links you to the CyberArk Support Page



Above is a sample configuration page. Here you can enter the details as described in section “[CyberArk EPM Settings \(Configuration\)](#)”; The button named “CyberArk EPM Retrieve Sets” will retrieve the available sets from EPM by using the credentials provided, you may need to retrieve the sets to have a fresh list of sets to be chosen from the field “Enabled EPM Sets”.

Requester (Requested for) Match

The “Requested for” field for a request is populated by matching the users’ record with the username derived from the Domain Name (request_for field); the match by default is based on the users’ user_name field. This could be configured by defining a system property in ServiceNow named “x_cya_cyberark_epm.user_identifier_field” with the value set with the field name to be used in the match comparison.

Approvers List

Based on the value of the setting “Level of Managerial Hierarchy in approvers”, the approvers list (approvers_list field) for each request will be populated.

- When the parameter is set to Zero (0), the approvers list will be comprised of the email addresses of the users with the role “x_cya_cyberark_epm.cyberark_epm_request_user” assigned.
- When the parameter is set to a value greater than Zero (0), the approvers list will be comprised of:
 - All managers’ emails to the level up in the hierarchy indicated by the parameter value (1 is immediate manager, and so on); make sure the manager field is defined and populated in ServiceNow for this functionality to work properly.
 - Emails of the users with the role “x_cya_cyberark_epm.cyberark_epm_approver_user” assigned.

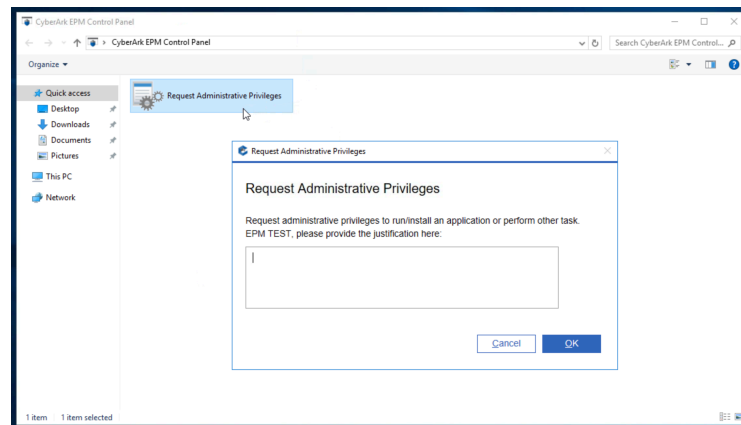
Note: Only users in the approvers list can approve or reject requests.

Manual Requests (JIT Access)

From endpoints where EPM agent is installed and configured, you can request Administrative Privileges as follows:

- Open “CyberArk EPM Control Panel”,
- Double-click on “Request Administrative Privileges”
- Please provide a justification, this could be used by the approver to understand the context

- The justification could also be used for an approval based on the ticket provided as a prefix to your justification.



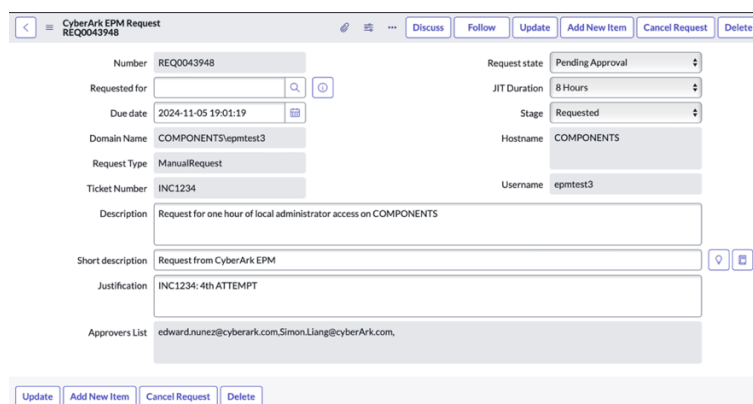
Approval based on existing ticket

If the integration has been configured with both ticketing parsing and approval based on existing ticket options enabled, the requester can provide a ticket in the justification when requesting access. Please verify the configuration for [JIT Access and Elevation Settings](#).

The automatic approval will be done based on the following criteria:

- If an incident is provided (INC prefix), the caller in the ServiceNow Incident needs to be the endpoint requester (associated via the username). The Incident will need to exist, and "In Progress"
- If a Change Request is provided (CHG prefix), the assigned_to in the ServiceNow Change Request needs to be the endpoint requester (associated via the username). The Change request needs to be in "Implement" and the requested time is during the schedule of the change request.

ServiceNow Manual Request



Notifications

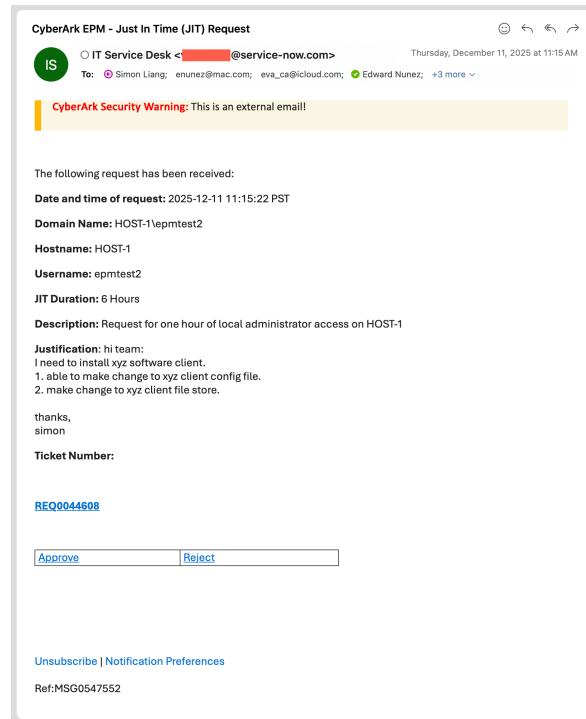
E-mail notifications will be sent for requests during the following events:

- Received
- Approved

Rejected

The requester email will be based on the association with ServiceNow user with the same username as the EPM requester. The approvers will receive notifications along with the requester. Please see the [Approvers List section](#) to understand how it is populated.

The notifications when the request is received will have a link to the actual request, and the option to approve or reject the request by responding via email.



Error Notifications

Integration errors will be sent to users that have the role of x_cya_cyberark_epm.admin, below is an example of an email with such error:

Cyberark-EPM-Plugin: Error

 IT Service Desk <[redacted]@service-now.com> Yesterday at 10:26 AM

To: [redacted]

CyberArk Security Warning: This is an external email!

Created: 2025-12-15 10:25:47 PST Created by: [redacted]@cyberark.com
Notification sent to: [redacted].com

MESSAGE

Cyberark EPM Plugin: Failed to authenticate to EPM => "Method failed: (/EPM/API/Auth/EPM/Logon) with code: 401 - Invalid username/password combo"

[Unsubscribe](#) | [Notification Preferences](#)

Ref:MSG0548596

6 TROUBLESHOOTING

Once the installation is installed and running, any error will be reported in the ServiceNow logs. From ServiceNow Navigator’s search item enter “System Logs - All”, you can enter a query criteria like:

- Source “starts with” x_cya
- Created “on” Today

All of these conditions must be met

Created	on	Today		AND	OR	
Source	starts with	x_cya		AND	OR	

All > Created on Today > Source starts with x_cya

Below, you can find common errors and actions suggested to resolve the errors/issues.

Error/Message in Log	Suggested Action
Logs show message “Cyberark EPM Plugin: Failed to authenticate to EPM” with Level Error, and another Information message as “makeHttpsCall - URL: https://login.epm.cyberark.com/EPM/API/Auth/EP M/Logon HTTP Status: 401 ResponseBody: Method failed: (/EPM/API/Auth/EP M/Logon) with code: 401 - Invalid username/password combo”	Make sure username and password for EPM are correct.,
Logs show message “Cyberark EPM Plugin: Failed to authenticate to EPM” with Level Error, and another Information message with “java.net.UnknownHostException: baseUrl”	Make sure the EPM Login URL in Settings is properly set (like https://login.epm.cyberark.com)
Logs show the following messages with Error level: - invalid configuration - CyberArk EPM Plugin: Enabled EPM Sets in EPM Settings is undefined...Please set value and re-run	Please go to the Settings page, and select Enabled EPM Sets to be considered by the integration.

7 PARTNER CONTACT INFO

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