

Get started with On-demand DataSync

Fluorine+

Perspectium On-demand DataSync gives you the power to provision an Amazon Web Services (AWS) EC2 instance, DataSync agent, and Relational Database Service (RDS) in your AWS account that will handle the syncing of your ServiceNow incident data. Plus, once your incident data is synced in your RDS, you can then view predefined dashboards with **Incident Analytics**, giving you better insight into your incident management processes.

NOTE: If you previously created a Perspectium On-demand DataSync AWS stack, [contact Perspectium Support](#) for a guided setup of On-demand DataSync and Incident Analytics.

Prerequisites

⚠ First, you will need an active ServiceNow instance (any version).

⚠ You will also need to [create and activate an AWS account](#).

⚠ If using Perspectium Incident Analytics (preconfigured Tableau dashboards to visualize your ServiceNow incident data), you will need Tableau version 10.2 or higher.

Procedure

To set up On-demand DataSync and Incident Analytics, follow these steps:

1

Access the Perspectium On-demand DataSync app

Log into your AWS account. Then, go to the AWS Marketplace and search for **Perspectium On-demand DataSync**. On the app landing page, click **Continue to Subscribe** in the upper right-hand corner of the screen.

On the **Subscribe to this Software** page, click **Accept Terms** to accept the terms of the [Perspectium End User License Agreement \(EULA\)](#) and the [AWS Customer Agreement](#). Then, wait for your request to be processed and click **Continue to Configuration**.

2

Start CloudFormation launch

On the **Configure this software** page, choose **Perspectium On-demand DataSync Deployment** from the **Fulfillment Option** dropdown. Then, choose a **Software Version** and the **Region** where your AWS server is located and click **Continue to Launch** in the upper right-hand corner of the screen.

On the **Launch this software** page, choose to **Launch CloudFormation** from the **Choose Action** dropdown.

3

Launch CloudFormation

On the **Select Template** page, make sure the **Specify an Amazon S3 template URL** is selected and the URL is populated from subscribing to the app.

Finally, click **Next**.

4

Configure your AWS stack settings

On the resulting page, type a name for your **Stack name** consisting of letters, numbers, and dashes (e.g., Perspectium-On-demand-DataSync).

Under **Parameters** and in the **Account & Security Information** section, enter your **Email Address** and accept the **License Agreement**.

Next in the **DataSync Server Configuration** section, select an AWS [Instance Type](#) for the EC2 instance where the DataSync agent will run on, specify a range of IP addresses (as a CIDR block; e.g. 192.168.0.0/16, 0.0.0.0/0, etc.) in the **IPRangeforEC2SSH** field that will be able to SSH to your EC2 instance where the DataSync Agent is running.

Then, choose a [previously created EC2 Key Pair](#) for authentication when accessing your EC2 instance via SSH.

[blocked URL](#) **NOTE:** If you haven't already created an EC2 Key Pair, you can create one [within your AWS account](#) or [using a command line interface](#).

Specify stack details

Stack name

Stack name

Perspectium-On-demand-DataSync

Stack name can include letters (A-Z and a-z), numbers (0-9), and dashes (-).

Enter a stack name

Parameters

Parameters are defined in your template and allow you to input custom values when you create or update a stack.

Account & Security Information

Email

(Optional) Enter your company email address to be emailed a copy of the setup information for the Perspectium DataSync app

Enter your email address

LicenseAgreement

To create the CloudFormation Stack, accept the terms & conditions of the End User License Agreement: http://bit.ly/psp_aws_eula

Yes

DataSync Server Configuration

InstanceType

The size of the EC2 instance for DataSync server

m4.2xlarge

EC2sshIPRange

The IP address range (as a CIDR block) that will be allowed to SSH into the EC2 node

192.168.0.0/16

Specify an IP range to SSH to your EC2 instance

KeyName

Name of an existing EC2 KeyPair to enable SSH access to the EC2 node

testuser

Choose an existing EC2 Key Pair

In the **Database Configuration** section, choose the **Database Type** that you want to sync your ServiceNow incident data with from the **DBType** field.

Then, specify a range of IP address (as a CIDR block; e.g. 192.168.0.0/16, 0.0.0.0/0, etc.) used to connect to your AWS RDS.

[blocked URL](#) **NOTE:** This should include the IP address of the EC2 instance created with this stack so the DataSync Agent can connect to the RDS to save data. It is recommended you use the value of **0.0.0.0/0** and then change it after the stack has completed to update to the IP address of your EC2 instance if you want to restrict access to only the instance.

You can optionally enter an existing RDS (if you have already created one in your AWS account) or Snowflake database to use by entering its URL and credentials in the **ExistingDBurl**, **ExistingDBusername** and **ExistingDBpassword** fields.

[blocked URL](#) **NOTE:** **Snowflake** requires you enter an existing Snowflake database as Snowflake currently cannot be created through an AWS CloudFormation.

Database Configuration

DBType
The type of database or service.

mysql

RDSConnectionIPRange
The IP address range (as a CIDR block) that will be used to connect your RDS database to your EC2 instance.

192.168.0.0/16

(Optional) Existing Database Information

ExistingDBurl
(Optional) URL (excluding 'http://' or 'https://') for an existing RDS instance or Snowflake database. If creating a new RDS instance, leave this blank.

ExistingDBUsername
(Optional) Username for an existing AWS RDS instance or Snowflake database. If creating a new RDS instance, leave this blank.

ExistingDBPassword
(Optional) Password for an existing AWS RDS instance or Snowflake database. If creating a new RDS instance, leave this blank.

Choose a Database Type

Enter an allowed IP address range (as a CIDR block) to connect to your RDS

Optional: Enter a URL for an existing AWS RDS or Snowflake database

Optional: Enter the username for an existing AWS RDS or Snowflake database

Optional: Enter the password for an existing AWS RDS or Snowflake database

Finally, click **Next** to go on to the **Configure stack options** page.

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Configure stack options (optional)

The **Configure stack options** page contains some optional configurations you can set for your ServiceBond EC2 instance. For more information on these configurations, see [setting AWS CloudFormation Stack Options](#).

However, in most cases, you can simply accept the default options on this page and click **Next** at the bottom of the page to navigate to the **Review** page and review your EC2 instance settings.

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Review and launch your AWS stack

At the bottom of the **Review** page, check the box to acknowledge that AWS CloudFormation might create IAM resources. Then, click **Create stack** to finish configuring your ServiceBond EC2 instance.

blocked URL NOTE: Your EC2 instance will take approximately 15-20 minutes to fully initialize. You can confirm that your EC2 instance is ready by navigating to **Services > EC2 (under Compute) > Instances**. Your EC2 instance will be ready when the **blocked URL** icon appears in the **Status Checks** column for your instance.

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View your Setup Information

After the CloudFormation stack has completed, the DataSync Agent will be installed in the EC2 instance at `/home/ec2-user/perspectium/Perspectium_Replicator_Agent`. The Agent will have the following folder structure:

```
drwxrwxr-x 5 ec2-user ec2-user 4096 Oct 26 06:35 bin
drwxrwxr-x 2 ec2-user ec2-user 165 Oct 26 05:59 conf
drwxrwxr-x 2 ec2-user ec2-user 25 Jun 19 20:03 extlib
drwxrwxr-x 2 ec2-user ec2-user 8192 Jun 19 20:03 jars
drwxrwxr-x 5 ec2-user ec2-user 104 Jun 19 20:03 lib
drwxrwxr-x 2 ec2-user ec2-user 84 Oct 26 06:47 logs
-rw-rw-r-- 1 ec2-user ec2-user 64 Jun 19 18:27 README.txt
drwxr-xr-x 2 root root 143 Oct 26 05:59 tmp
drwxrwxr-x 2 ec2-user ec2-user 48 Jun 19 20:03 Uninstaller
```

Your setup information will be saved in the file `/home/ec2-user/perspectium/Perspectium_Replicator_Agent/conf/perspectium_setup_information.txt` on the EC2 instance created. If you entered your email address in the **Parameters** in **Step #4**, you will receive an email from Perspectium Support confirming that your Perspectium On-demand DataSync stack has been configured. Next complete either **Step #7a** or **Step #7b** as applicable:

7a) New to Perspectium?

If this is your first time using a Perspective product, note your **Perspective Account ID** and **Perspective License Key** in the setup information file or your confirmation email. You will need to enter this information on the **AWS On-demand DataSync Setup** page in **Step #10**. But for now, proceed to **Step #8**.

To download and install the Perspective DataSync app for ServiceNow, enter the information below on the **AWS On-demand DataSync Setup** page:

Account ID: [redacted]

License Key: [redacted]

Note your Account ID and License Key

7b) Already using a Perspective for ServiceNow app?



To enable On-demand DataSync with your existing Perspective app, you must have at least the [Fluorine Patch 1](#) of the Perspective app. So the DataSync agent can create tables in the database properly, select the **Share schema** option enabled under the **Advanced** tab in your **bulk share**. If you would like to use the Tableau Incident Analytics in the steps below, enable the **add display values** option enabled in Replicator Properties.

If you have already installed a Perspective app on your ServiceNow instance and are comfortable creating [ServiceNow shared queues](#) and [bulk shares](#), you can use the **Queue name**, **Endpoint URL**, **Queue username**, **Queue password**, and **Queue Encryption Key** in the setup information file or your confirmation email to [create a new ServiceNow shared queue](#) in your instance.

Otherwise, if using an existing Perspective app on your ServiceNow instance to bulk share data to AWS, create a new shared queue with the following information:

Queue name: [redacted]

Queue username: [redacted]

Queue password: [redacted]

Queue encryption key: [redacted]

Note your queue name, username, password, and encryption key

Then, create and execute a bulk share pointing to the [redacted] target queue.

Then, [create a ServiceNow bulk share](#) pointing to the target queue and proceed to **Step #12**.

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Download the DataSync for ServiceNow app

Download the [Perspective DataSync for ServiceNow app](#) here, and note the directory where you save the file.

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Install the DataSync for ServiceNow app

Log into your ServiceNow instance and use the Filter Navigator to navigate to **System Update Sets > Retrieved Update Sets**. In the resulting form, click **Import Update Set from XML** under the **Related Links** section. Upload the Perspective DataSync update set (.xml file) from the directory you saved the file in for **Step #8**. Then, click into the Perspective Data Sync update set and click **Preview Update Set**.

The screenshot shows the ServiceNow 'Retrieved Update Set' form for 'Perspective DataSync'. The form includes fields for Name, Application, Update source, Parent, State, Loaded, and Description. The 'Preview Update Set' button is highlighted with a red box and an arrow pointing to it. A red text overlay says 'Click to preview the Perspective DataSync update set'.

After Preview Update Set finishes running, close out of the pop-up and check if there are any errors or warnings. If errors or warnings have occurred, they will appear in the list at the bottom of the form under the **Update Set Preview Problems** tab. Check the box next to each error or warning and choose whether to **Accept remote update** or **Skip remote update**. To view previously configured fields and updates that may be affected for each error or warning, click **Show local field** and/or **Show local update**. For more information, see [preview a remote update set](#).

Once any errors or warnings have been addressed, click **Commit Update Set** in the upper right-hand corner of the form. After Update Set Commit finishes running, close out of the pop-up.

The screenshot shows the ServiceNow interface for managing update sets. The left sidebar shows 'System Update Sets' and 'Retrieved Update Sets'. The main area displays details for the 'Retrieved Update Set' named 'Perspectium DataSync'. The 'Commit Update Set' button is highlighted with a red box and an arrow. A red text overlay says 'Click to finish the Perspectium DataSync app'.

Field	Value
Name	Perspectium DataSync
Application	Perspectium DataSync
Update source	
Parent	
State	Previewed
Loaded	2019-05-04 23:00:29
Description	
Application name	Perspectium DataSync
Committed	
Inserted	1,160
Updated	1,254
Deleted	0
Collisions	4
Total	2,418

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Set up your DataSync app

In ServiceNow's Filter Navigator, navigate to **Perspectium DataSync > Control and Configuration > Setup**. On the **User Agreement** page, read through the terms of the Perspectium User Agreement and then click **I Accept** to accept these terms.

On the **AWS On-demand DataSync Setup** page, enter your ServiceNow username and password in the appropriate fields.

blocked URL NOTE: The ServiceNow user must have the role of **admin**.

Then, enter the **Perspectium Account ID** and **License Key** from the file `/home/ec2-user/perspectium/Perspectium_Replicator_Agent/conf/perspectium_setup_information.txt` on the EC2 instance or from your confirmation email in **Step #7** and click **Finish Setup**.

NOTE: If you change your ServiceNow password after entering it on the AWS On-demand DataSync Setup page, you will need to update your **ServiceNow Password** in your Perspectium Properties by navigating to **Perspectium DataSync > Control and Configuration > Properties** and then clicking **Save** after updating your password. For more information about using Perspectium DataSync, see [DataSync for ServiceNow](#).



AWS On-Demand DataSync Setup

To install the Perspectium DataSync app and enable outbound data sharing, enter your ServiceNow instance login information and AWS account information. Then, click Finish Setup.

The form contains four input fields: 'ServiceNow Username' with the value 'admin', 'ServiceNow Password' with masked characters, 'Perspectium Account ID' with the value '000000000000', and 'Perspectium License Key' with masked characters. Each password field has a 'Show Password' checkbox. A blue 'Finish Setup' button is at the bottom. Red arrows point to the password fields with the text 'Enter your ServiceNow instance login info' and to the Account ID and License Key fields with the text 'Enter your Perspectium Account ID and License Key'.

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Run your ServiceNow bulk share

So the DataSync agent can create tables in the database properly, select the **Share schema** option enabled under the **Advanced** tab in your **bulk share**. If you would like to use the Tableau Incident Analytics in the steps below, enable the **add display values** option enabled in Replicator Properties.

You will then be automatically redirected to the Perspectium **Bulk Share** list view. Click into the **On Demand DataSync Incidents** bulk share record and then click **Execute Now**, which will initiate the bulk migration of your existing incident data from ServiceNow to your AWS RDS.

The screenshot shows the 'Bulk Share' page for 'On Demand DataSync Incidents'. The left sidebar has a 'Perspectium DataSync' section with 'Control and Configuration' expanded, showing 'Properties', 'Setup', 'Error Notification', and 'Start All Jobs'. The main area shows fields for 'Name' (On Demand DataSync Incidents), 'Table name' (Incident [incident]), 'Records Processed', and 'Records per second'. On the right, there are fields for 'Status' (None), 'Started', 'Completed', 'Duration' (00:00:00), 'Advanced' (checked), and 'Obfuscated Records' (0). A red arrow points to the 'Execute Now' button with the text 'Click to bulk mig ServiceNow inci to AWS'.

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(Optional) Open your preconfigured Tableau workbook

Download and then open one of the following preconfigured Incident Analytics workbooks for Tableau per the **Database Type** you selected in **Step #4**:

Database Type	File to download
MySQL	Incident Analytics for MySQL
Oracle	Incident Analytics for Oracle
MS SQL Server	Incident Analytics for MS SQL Server

blocked URL **NOTE:**

(Optional) Connect Tableau to your AWS RDS

Locate your AWS RDS connection information by logging into your AWS account and navigating to **Services > RDS** (under **Databases**) > **DB Instances** (under **Resources**). Click the name of the stack you created in **Step #4**. Note your **Endpoint** and **Port** under the **Connectivity & Security** tab.

The screenshot shows the AWS Management Console for an Amazon RDS instance named 'on-demand-rds'. The left sidebar contains navigation options like Dashboard, Databases, Query Editor, etc. The main content area shows the instance details under the 'Connectivity & security' tab. A red box highlights the 'Endpoint & port' section, which contains the following information:

Endpoint & port	
Endpoint	on-demand-rds.cu4y5yedojn3.us-east-1.rds.amazonaws.com
Port	3306

A red arrow points to this section with the text: **Note your endpoint and port number**.

Back in Tableau, enter your database **Server URL** (as your AWS RDS **Endpoint URL**) and **Port** number. Enter the **Username** and **Password** from the file `/home/ec2-user/perspective/Perspective_Replicator_Agent/conf/perspective_setup_information.txt` on the EC2 instance or from your confirmation email from Perspective Support in **Step #7**. If you didn't receive this email or do not have this setup file, contact [Perspective Support](#).

NOTE: If you opted to use an existing RDS in **Step #4**, you must update or create a database user in your RDS database with the **Username** of **admin** and the password given in the setup information file or confirmation email.

Enter this information into the appropriate fields and then click **Sign In** to finish connecting your Tableau workbook to your AWS RDS. Five preconfigured Tableau dashboards will then populate with the incident data that was bulk migrated from your ServiceNow instance to your AWS RDS.

MySQL
Perspective Incident Analytics

Server: Port:

Enter information to sign in to the server:

Username:

Password:

☐ Require SSL

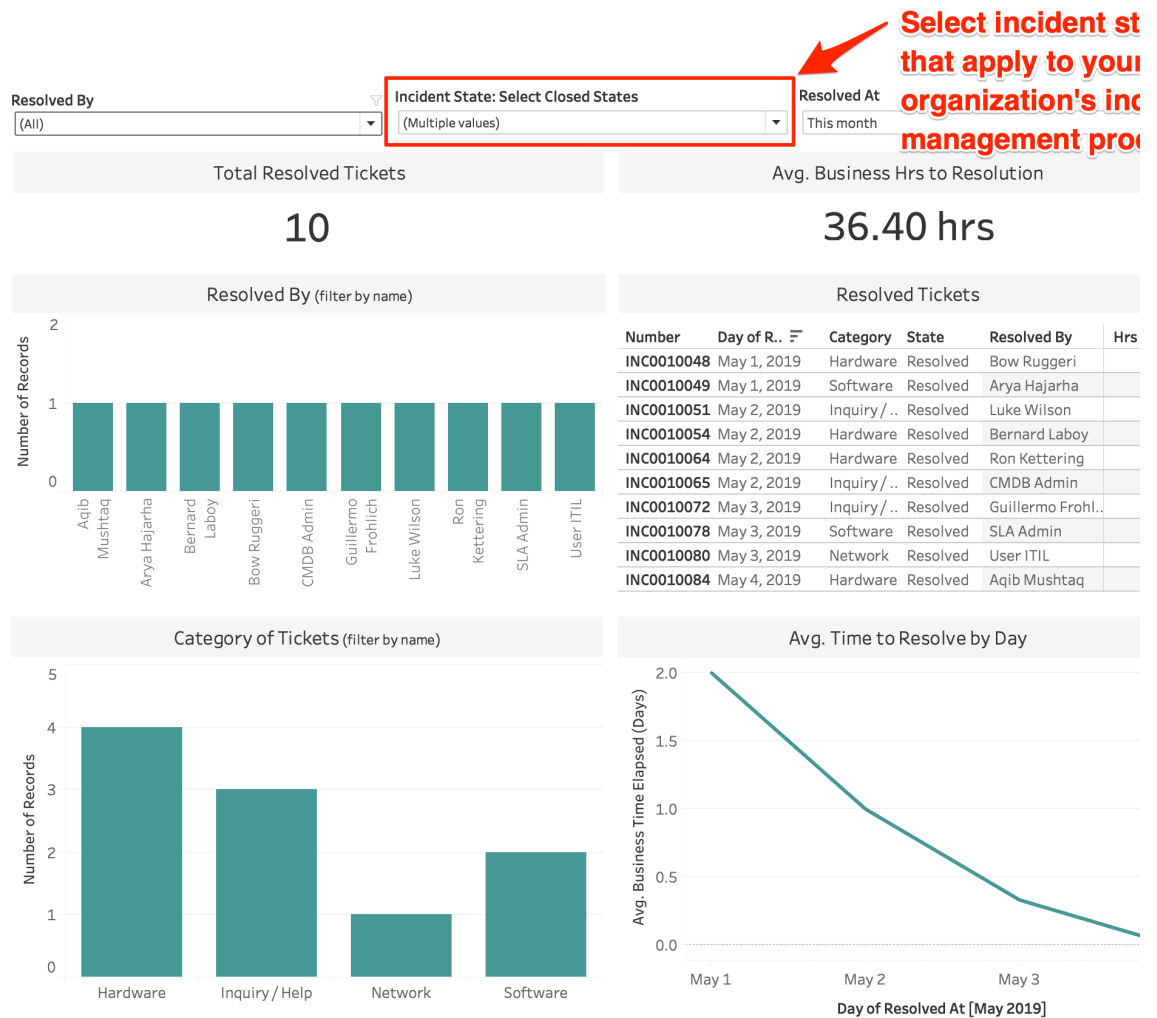
[Initial SQL...](#)

NOTE: If connecting to an **Oracle** database, enter **pspdb** in the **SID** field.

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(Optional) Choose Open and Resolved incident types

Click the **Open and New Incidents** dashboard. Then go to **Incident State: Select Open States** and check all options that apply to **Open** states for incidents per your organization's incident management process. Then, click the **Resolved Incidents** dashboard, go to **Incident State: Select Closed States** and check all options that apply to **Resolved** per your organization's incident management process.



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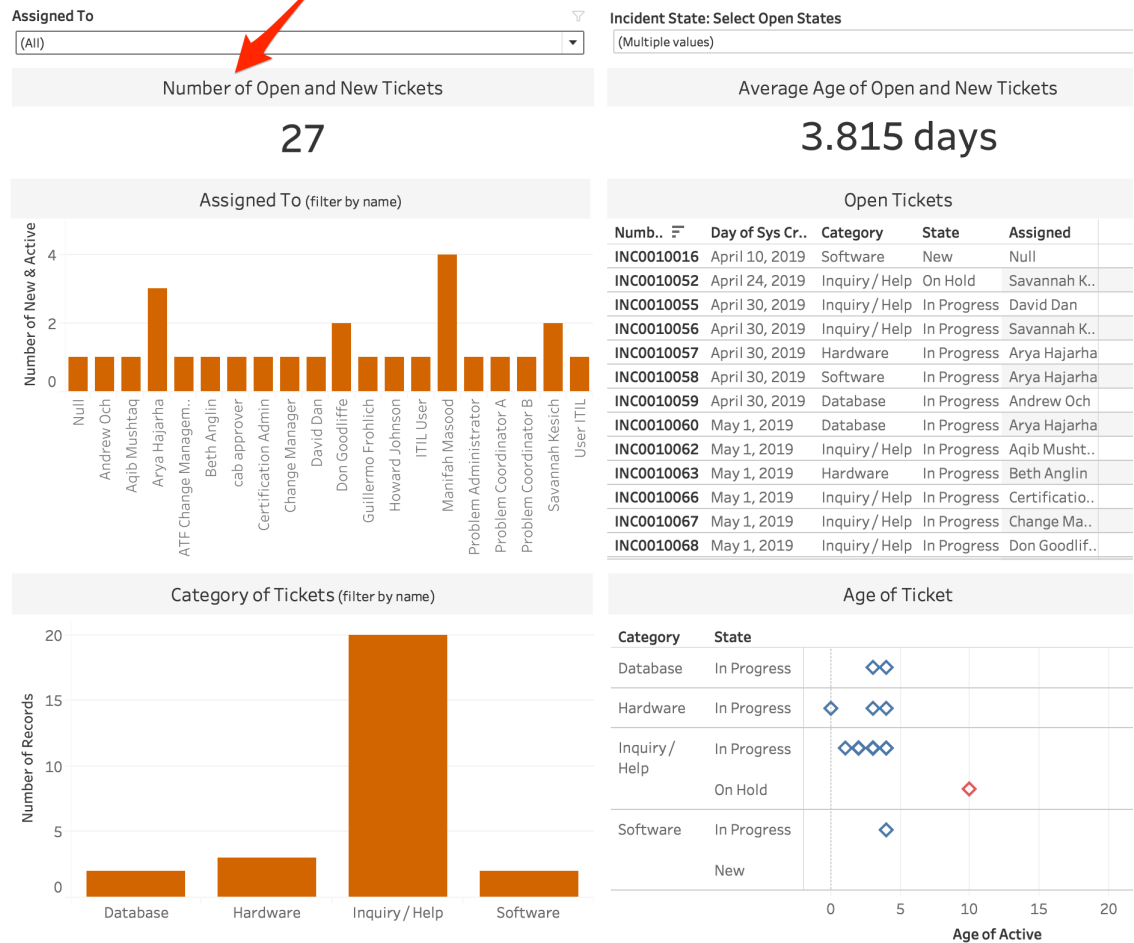
(Optional) View Perspectium Incident Analytics dashboards

Perspectium's preconfigured Incident Analytics dashboards provide you with a variety of data visualizations for the incidents managed by your organization, including:

Visualization	Description
Avg Hours to Close	Displays the time that the incidents were closed on and the average number of hours to close
Volume of incidents	Displays the volume of incidents per hour
Resolved by	Displays the magnitude of the number of incidents that a user resolved.
Category of incidents	Displays the number of incidents per category
Assigned to	Displays the number of open incidents assigned to a user. Click on a user to filter all charts by name
Age of Incident	Displays how long an incident has been open (in days) along with the category and current state

NOTE: To learn more about each Incident Analytics data visualization, hover over the title for a visualization to see its description.

Hover over a data visualization's title to see a description of the data being displayed



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Try out Perspectium On-demand DataSync

If you are new to Perspectium, browse through [other DataSync for ServiceNow topics](#) to find out more about how to leverage the power to sync, transform, and visualize your ServiceNow data in various other data stores.

Having trouble setting up On-demand DataSync & Incident Analytics?

Post your inquiry on the [Perspectium Community Forum](#) or [contact Perspectium Support](#) for more help.

Similar topics

- [Get started with On-demand DataSync](#)

Contact Perspectium Support

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