

Get started with On-demand DataSync

Gold

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.

blocked URL 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

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

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

blocked URL 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

Choose a Database Type

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

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

(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, this field is not required.

ExistingDBusername
(Optional) Username for an existing AWS RDS instance or Snowflake database. If creating a new RDS instance, this field is not required.

ExistingDBpassword
(Optional) Password for an existing AWS RDS instance or Snowflake database. If creating a new RDS instance, this field is not required.

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 Perspectium product, note your **Perspectium Account ID** and **Perspectium 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 has a left sidebar with 'retrieved update' and 'System Update Sets' sections. The main form area contains 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. On the left is a sidebar with 'retrieved upda' and 'System Update Sets'. The main area displays details for the 'Retrieved Update Set' named 'Perspectium DataSync'. Fields include Name, Application, Update source, Parent, State (Previewed), Loaded (2019-05-04 23:00:29), and Description. On the right, statistics are shown: Committed, Inserted (1,160), Updated (1,254), Deleted (0), Collisions (4), and Total (2,418). At the bottom are buttons for Update, Delete, Run Preview Again, and Commit Update Set. The 'Commit Update Set' button is highlighted with a red box and an arrow, with a red text overlay: 'Click to finish the Perspectium DataSync app'.

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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**.

blocked URL 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](#).

perspectium 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 screenshot shows the 'AWS On-Demand DataSync Setup' page. It has four input fields: 'ServiceNow Username*' (with 'admin' entered), 'ServiceNow Password*' (masked with dots), 'Perspectium Account ID*' (with '000000000000' entered), and 'Perspectium License Key*' (masked with dots). There are 'Show Password' checkboxes for the password and license key fields. A blue 'Finish Setup' button is at the bottom. Two red arrows point to the password and license key fields. The first arrow has a red text overlay: 'Enter your ServiceNow instance login info'. The second arrow has a red text overlay: '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 ServiceNow interface for managing bulk shares. The left sidebar contains navigation options like 'Control and Configuration', 'Properties', 'Setup', 'Error Notification', and 'Start All Jobs'. The main area displays details for the 'On Demand DataSync Incidents' bulk share, including fields for Name, Table name, Records Processed, and Records per second. The 'Execute Now' button is prominently displayed and highlighted with a red box and an arrow. A red text overlay reads '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:**

- If using a Tableau version higher than **10.2**, a pop-up will appear asking you to confirm upgrade to your current Tableau version. Click **OK** to accept this upgrade.
- If you have your own Tableau data visualizations that you want to use for ServiceNow data other than **incident** data, you can skip **Steps #12-15**.
- These workbooks require you replicate the **incident** and **task_sla** tables.
- After entering your data source information, the dashboards will default to using a **psp_repl** database. If the **incident** and **task_sla** tables are located in a different database, you may be required to change it under the **Data Source** tab in Tableau.

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(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.

Amazon RDS

RDS > Databases > on-demand-rds

on-demand-rds

Modify Actions

Summary			
DB identifier on-demand-rds	CPU 0.38%	Info Available	Class db.r4.xlarge
Role Instance	Current activity 11 Connections	Engine MySQL	Region & AZ us-east-1a

Connectivity & security Monitoring Logs & events Configuration Maintenance & backups Tags

Connectivity & security

Endpoint & port

Endpoint
on-demand-rds.cu4y5yedo3.us-east-1.rds.amazonaws.com

Port
3306

Networking

Availability zone
us-east-1a

VPC

Subnet group

Security

VPC security groups

Public accessibility
Yes

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/perspectium/Perspectium_Replicator_Agent/conf/perspectium_setup_information.txt` on the EC2 instance or from your confirmation email from Perspectium Support in **Step #7**. If you didn't receive this email or do not have this setup file, contact [Perspectium Support](#).

blocked URL 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
Perspectium Incident Analytics

Server: Enter Server Port:

Enter information to sign in to the server:

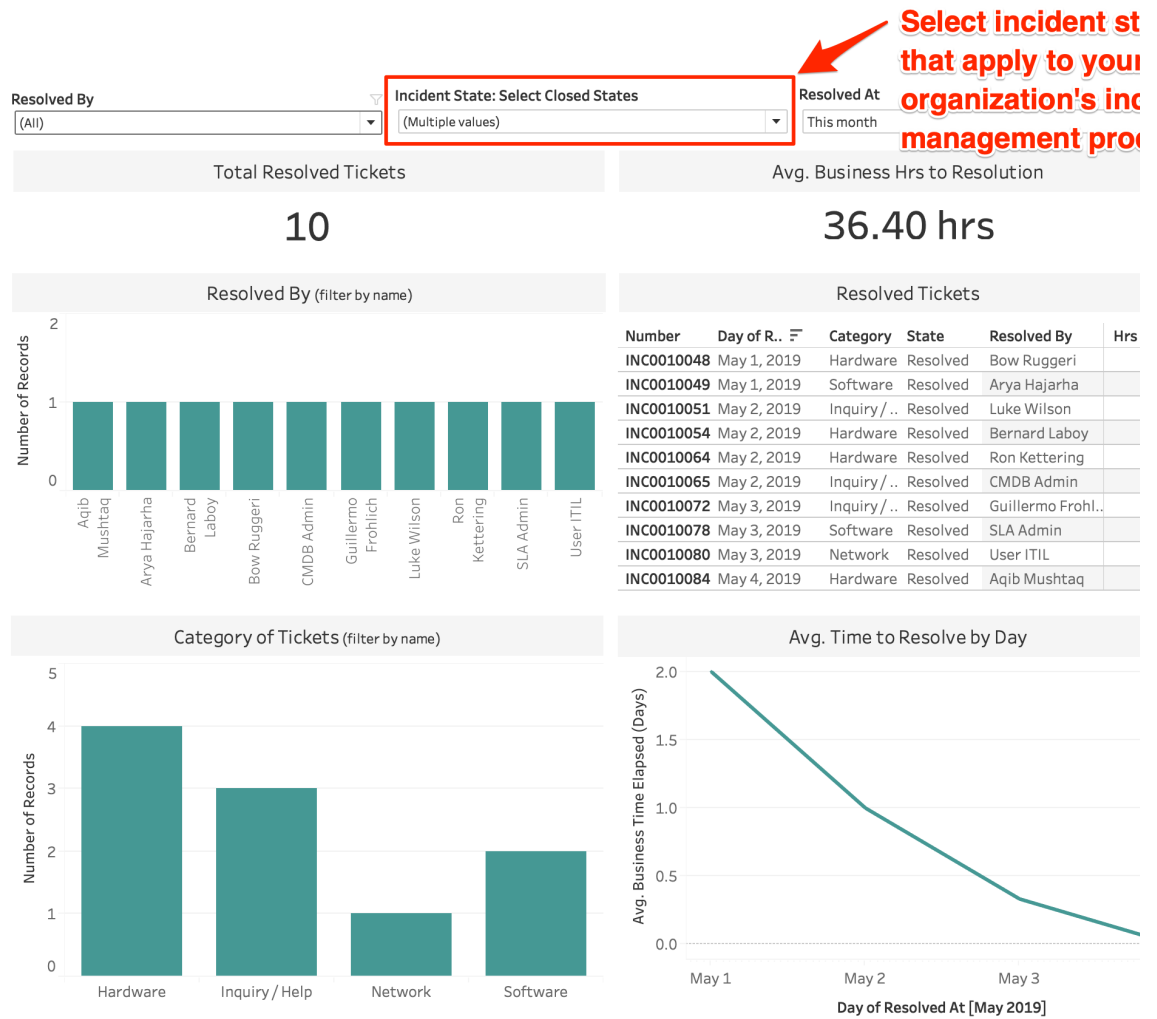
Username: Enter Username Password:

☐ Require SSL

Initial SQL... Sign In

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

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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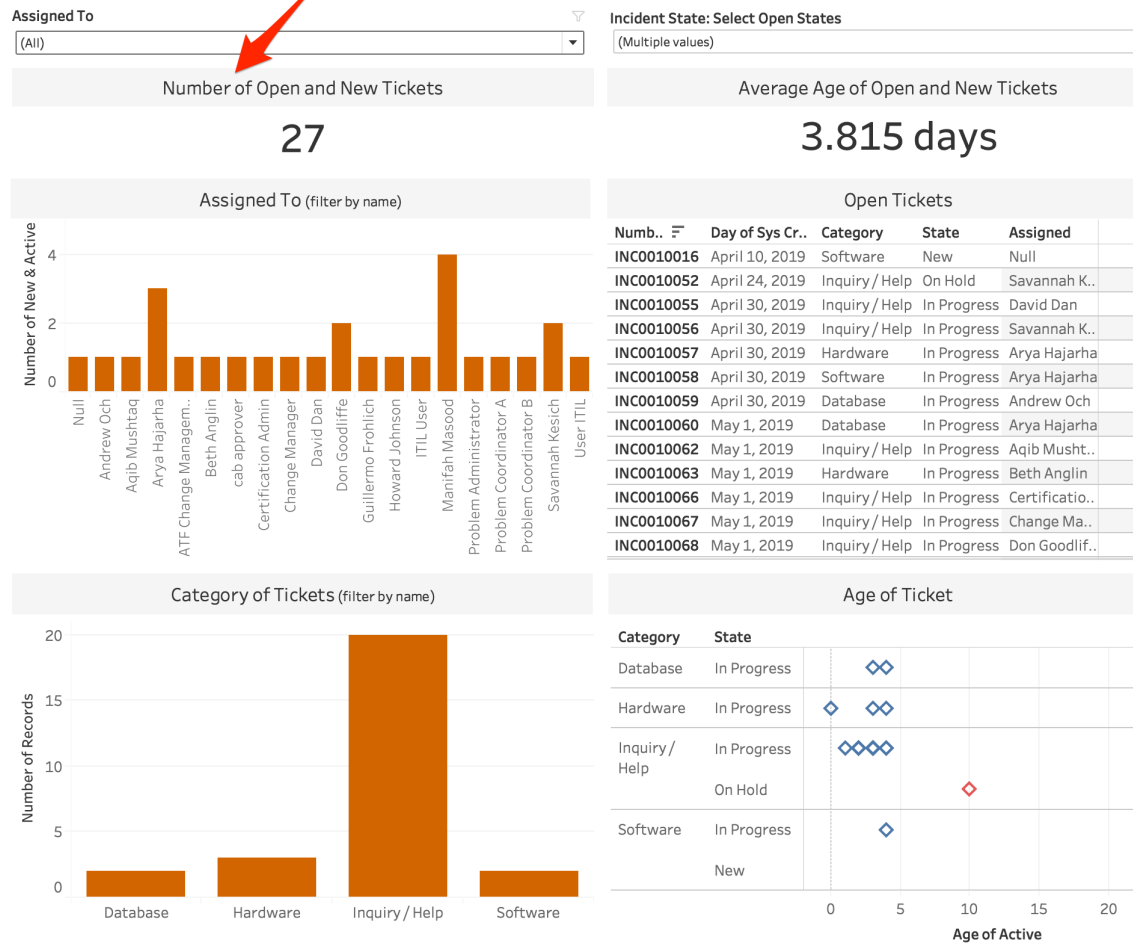
(Optional) View Perspectium Incident Analytics dashboards

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

blocked URL 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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UK: 44 208 068 5953

support@perspectium.com