

# Get started with On-demand DataSync & Incident Analytics

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

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⚠ 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:

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### 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**.

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### 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.

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### 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**.

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### 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

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

### 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

### LicenseAgreement

To create the CloudFormation Stack, accept the terms & conditions of the End User License Agreement: [http://bit.ly/psp\\_aws\\_eula](http://bit.ly/psp_aws_eula)

### DataSync Server Configuration

InstanceType

The size of the EC2 instance for DataSync server

EC2sshIPRange

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

KeyName

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

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 you are creating a new RDS instance, you can leave this field blank.

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

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

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

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

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 Perspectium 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 Perspectium for ServiceNow app?

⚠ To enable On-demand DataSync with your existing Perspectium app, you must have at least the [Fluorine Patch 1](#) of the Perspectium 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 Perspectium 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 Perspectium 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 [Perspectium 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 Perspectium DataSync update set (.xml file) from the directory you saved the file in for **Step #7**. Then, click into the Perspectium Data Sync update set and click **Preview Update Set**.

The screenshot shows the ServiceNow interface for a Retrieved Update Set. The form fields include:

- Name: Perspectium DataSync
- Application: Perspectium DataSync
- Update source: [empty]
- Parent: [empty]
- State: Loaded
- Loaded: 2019-05-04 23:00:29
- Description: [empty]
- Application name: Perspectium DataSync

Buttons at the bottom include Update, Delete, and Preview Update Set. A red arrow points to the Preview Update Set button, with a red text overlay: "Click to preview the Perspectium 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 'Retrieved Update Set' page for 'Perspectium DataSync'. The 'Commit Update Set' button is highlighted in red in the top right corner. A red arrow points to it with the text 'Click to finish the Perspectium DataSync app'. The form contains the following fields:

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

At the bottom of the form, there are buttons for 'Update', 'Delete', 'Run Preview Again', and 'Commit Update Set'.

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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** you received in your confirmation email in **Step #6** 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 screenshot shows the 'AWS On-Demand DataSync Setup' form. It contains the following fields:

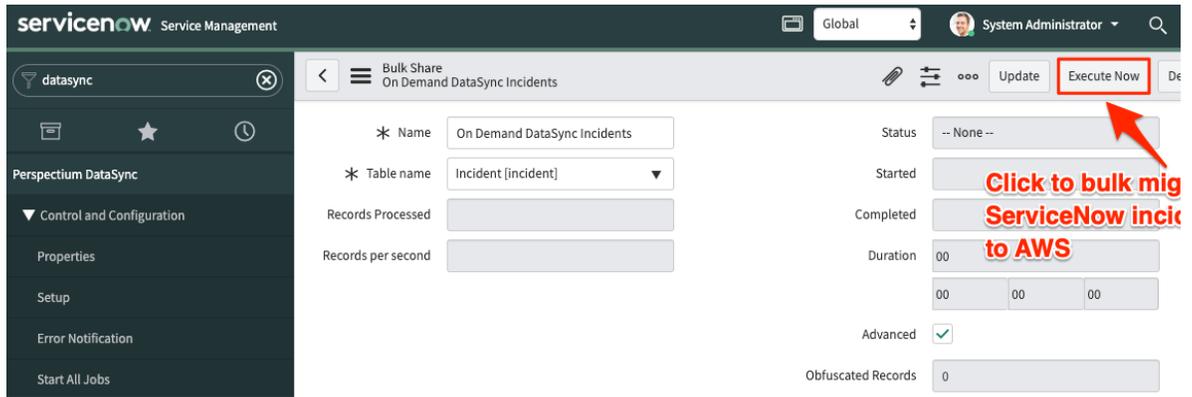
- ServiceNow Username\* (admin)
- ServiceNow Password\* (masked with dots)
- ServiceNow Password visibility:  Show Password
- Perspectium Account ID\* (000000000000)
- Perspectium License Key\* (masked with dots)
- Perspectium License Key visibility:  Show Password

At the bottom of the form is a blue button labeled 'Finish Setup'. Red arrows point to the 'ServiceNow Username' and 'ServiceNow Password' fields with the text 'Enter your ServiceNow instance login info'. Another red arrow points to the 'Perspectium Account ID' and 'Perspectium License Key' fields with the text 'Enter your Perspectium Account ID and License Key'.

## Run your ServiceNow bulk share

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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.



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### 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 #3**:

Database Type	File to download
MySQL	<a href="#">Incident Analytics for MySQL</a>
Oracle	<a href="#">Incident Analytics for Oracle</a>
MS SQL Server	<a href="#">Incident Analytics for MS SQL Server</a>

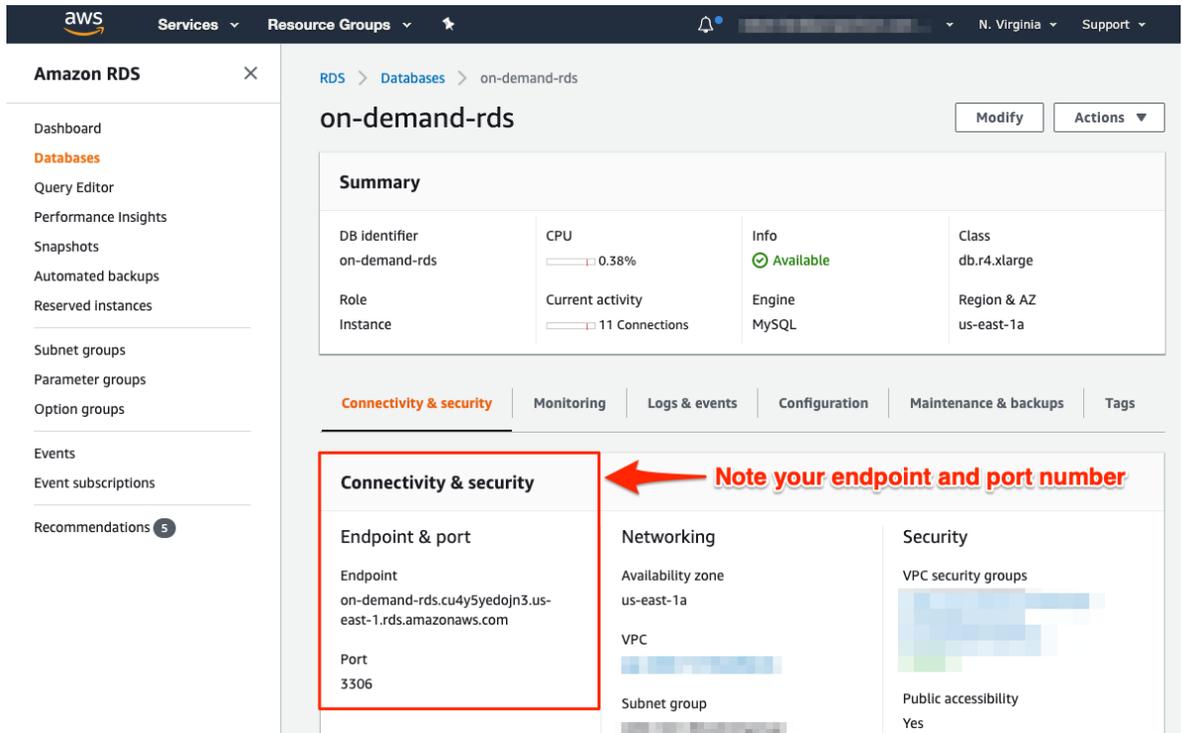
**blocked URL NOTE:** If using a Tableau version higher than 10.2, a pop-up will appear asking you to confirm upgrade to your current Tableau version. Click **OK** to accept this upgrade.

**NOTE:** If you have your own Tableau data visualizations that you want to use for ServiceNow data other than **incident** data, you can skip **Steps #11-14**.

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### Connect Tableau to your AWS RDS

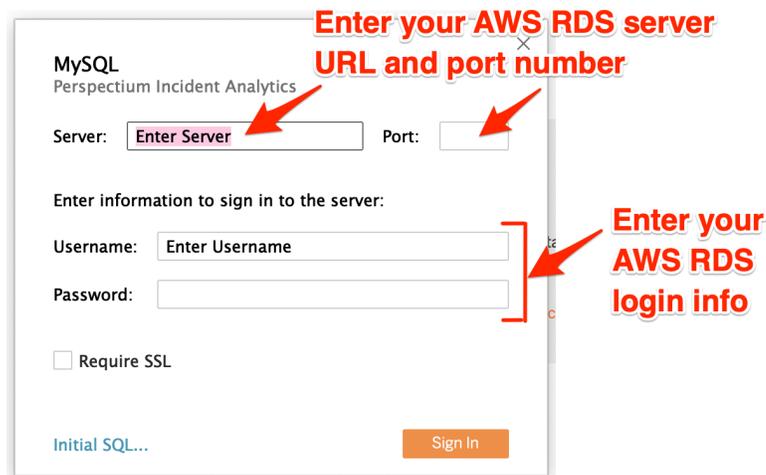
Locate your AWS RDS connection information by logging into your AWS account and navigating to **Services > RDS** (under **Datab ase**) > **DB Instances** (under **Resources**). Click the name of the stack you created in **Step #3**. Note your **Endpoint** and **Port** under the **Connectivity & Security** tab.



Back in Tableau, enter your database **Server URL** (as your AWS RDS **Endpoint URL**) and **Port** number. Enter the **Username** and **Password** you received in your confirmation email from Perspectium Support in **Step #6**. If you didn't receive this email, contact [Perspectium Support](#).

**NOTE:** If you opted to use an existing RDS in **Step #3**, you must update or create a database user in your RDS database with the **Username** of **admin** and **Password** of **adminadmin**.

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.



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

## 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.

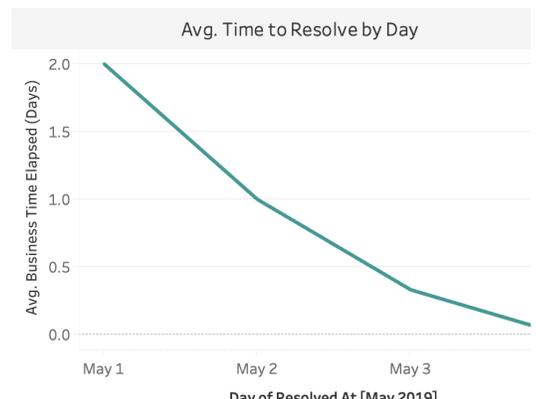
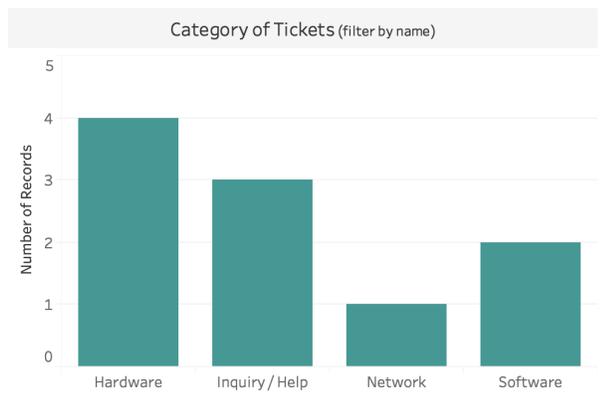
Resolved By: (All) | Incident State: Select Closed States (Multiple values) | Resolved At: This month

Total Resolved Tickets: **10** | Avg. Business Hrs to Resolution: **36.40 hrs**

Select incident st that apply to your organization's inc management pro



Number	Day of R..	Category	State	Resolved By	Hrs
INC0010048	May 1, 2019	Hardware	Resolved	Bow Ruggieri	
INC0010049	May 1, 2019	Software	Resolved	Arya Hajarha	
INC0010051	May 2, 2019	Inquiry / ..	Resolved	Luke Wilson	
INC0010054	May 2, 2019	Hardware	Resolved	Bernard Laboy	
INC0010064	May 2, 2019	Hardware	Resolved	Ron Kettering	
INC0010065	May 2, 2019	Inquiry / ..	Resolved	CMDB Admin	
INC0010072	May 3, 2019	Inquiry / ..	Resolved	Guillermo Frohlich	
INC0010078	May 3, 2019	Software	Resolved	SLA Admin	
INC0010080	May 3, 2019	Network	Resolved	User ITIL	
INC0010084	May 4, 2019	Hardware	Resolved	Aqib Mushtaq	



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### 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**

Assigned To: (All)

**Number of Open and New Tickets**

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Assigned To (filter by name)

Assigned To	Number of New & Active
Null	1
Andrew Och	1
Aqib Mushtaq	1
Arya Hajarha	3
ATF Change Managem...	1
Beth Anglin	1
cab approver	1
Certification Admin	1
Change Manager	1
David Dan	1
Don Goodliffe	2
Guillermo Frohlich	1
Howard Johnson	1
ITIL User	1
Manifmah Masood	4
Problem Administrator	1
Problem Coordinator A	1
Problem Coordinator B	1
Savannah Kesich	2
User ITIL	1

Incident State: Select Open States (Multiple values)

**Average Age of Open and New Tickets**

3.815 days

Open Tickets

Numb..	Day of Sys Cr..	Category	State	Assigned
INCO010016	April 10, 2019	Software	New	Null
INCO010052	April 24, 2019	Inquiry / Help	On Hold	Savannah K..
INCO010055	April 30, 2019	Inquiry / Help	In Progress	David Dan
INCO010056	April 30, 2019	Inquiry / Help	In Progress	Savannah K..
INCO010057	April 30, 2019	Hardware	In Progress	Arya Hajarha
INCO010058	April 30, 2019	Software	In Progress	Arya Hajarha
INCO010059	April 30, 2019	Database	In Progress	Andrew Och
INCO010060	May 1, 2019	Database	In Progress	Arya Hajarha
INCO010062	May 1, 2019	Inquiry / Help	In Progress	Aqib Musht..
INCO010063	May 1, 2019	Hardware	In Progress	Beth Anglin
INCO010066	May 1, 2019	Inquiry / Help	In Progress	Certificatio..
INCO010067	May 1, 2019	Inquiry / Help	In Progress	Change Ma..
INCO010068	May 1, 2019	Inquiry / Help	In Progress	Don Goodlif..

**Category of Tickets (filter by name)**

Category	Number of Records
Database	2
Hardware	3
Inquiry / Help	20
Software	2

**Age of Ticket**

Category	State	Age of Active
Database	In Progress	~3
Hardware	In Progress	~1
Hardware	In Progress	~3
Inquiry / Help	In Progress	~2
Inquiry / Help	In Progress	~3
Inquiry / Help	In Progress	~4
Inquiry / Help	On Hold	~10
Software	In Progress	~4
Software	New	~4

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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 & Incident Analytics](#)

### Contact Perspectium Support

US: 1 888 620 8880



UK: 44 208 068 5953

[support@perspectium.com](mailto:support@perspectium.com)