



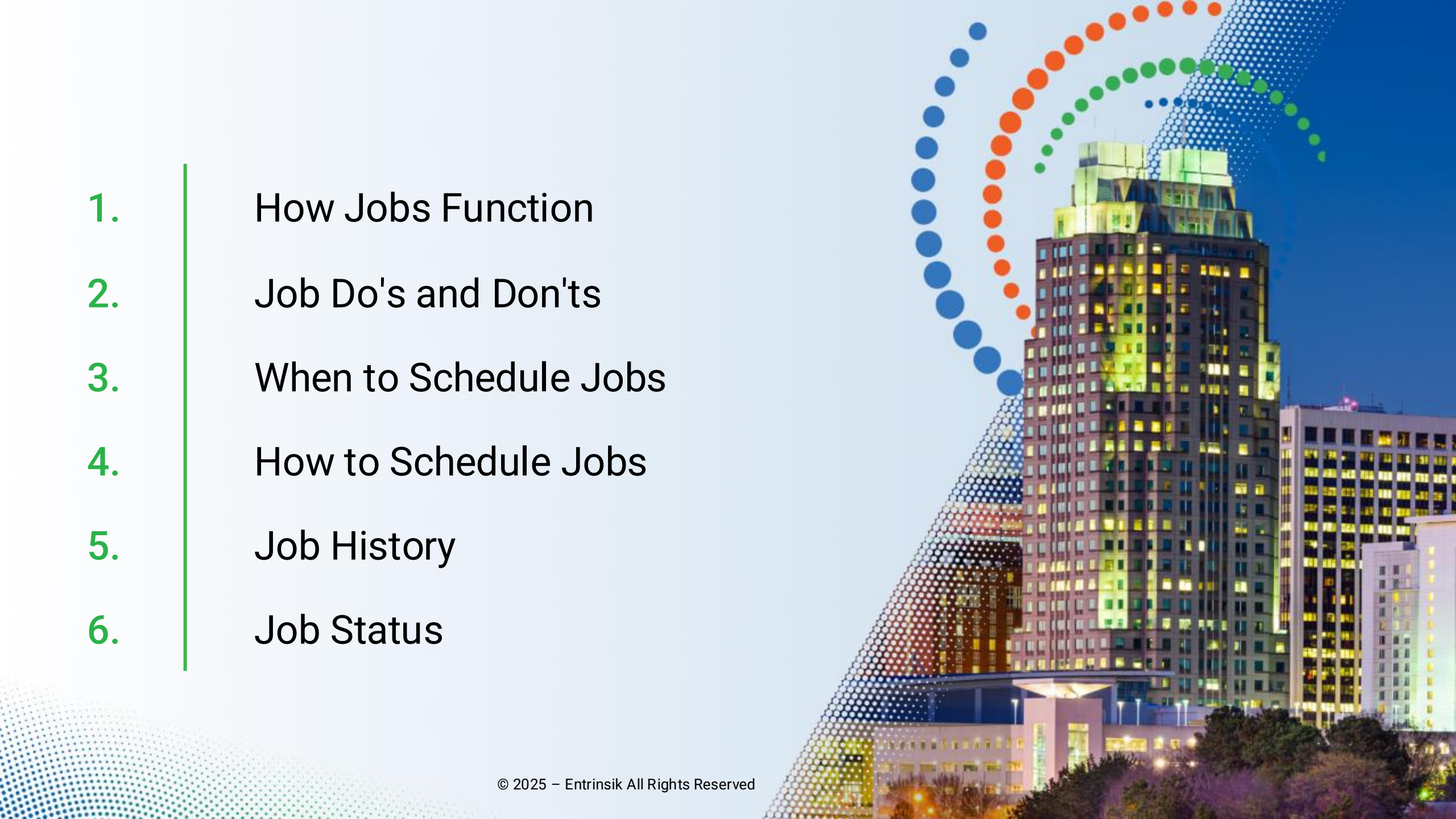
# Best Practices for Job Administration

How to get the most from  
the Informer Job queue!

**Steven McKinny**

Implementation Specialist II



- 
1. How Jobs Function
  2. Job Do's and Don'ts
  3. When to Schedule Jobs
  4. How to Schedule Jobs
  5. Job History
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System Jobs

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Frequent Issues

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Q & A

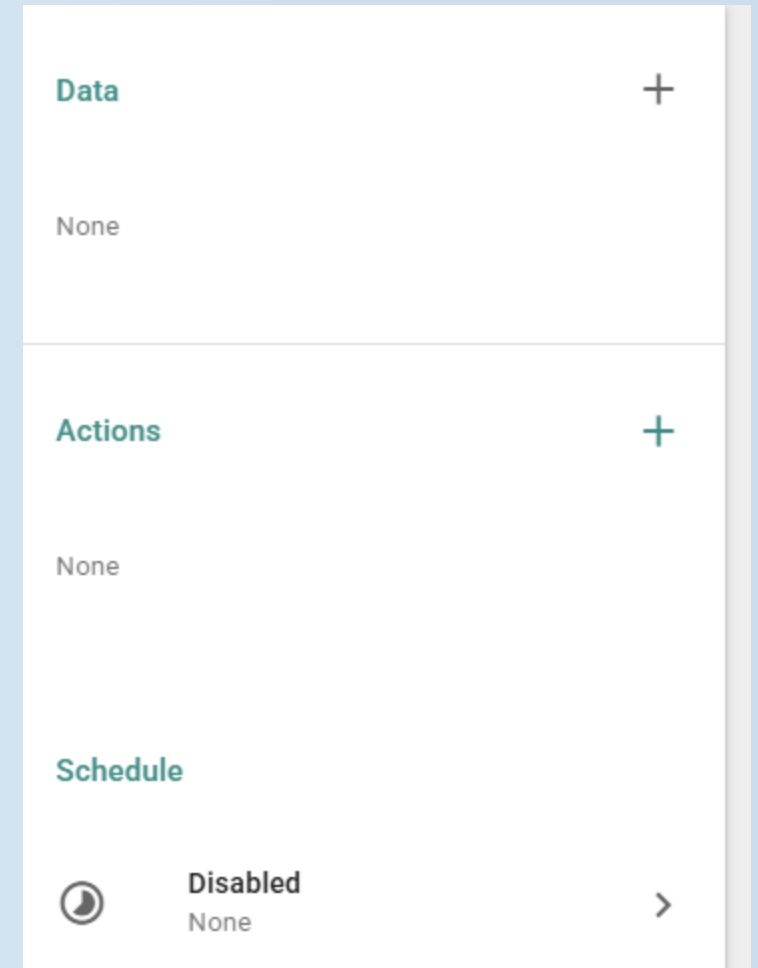


# What are Jobs



Automated Scheduled tasks for:

- Running Ad-hoc Queries & Refreshing Datasets
- Performing Actions with Curated data
- System Maintenance



# Who is this for

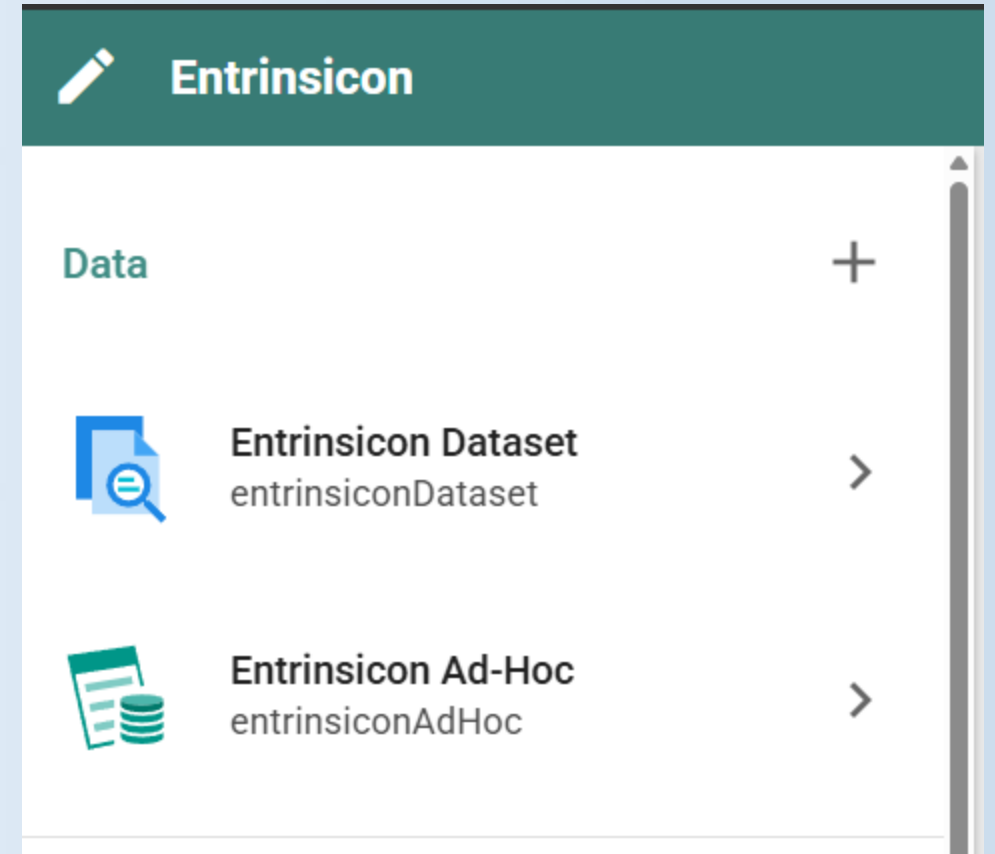


- System and Application Administrators
- Informer Super users
- Informer Normal users with top level Job permissions

# Data & Refreshing

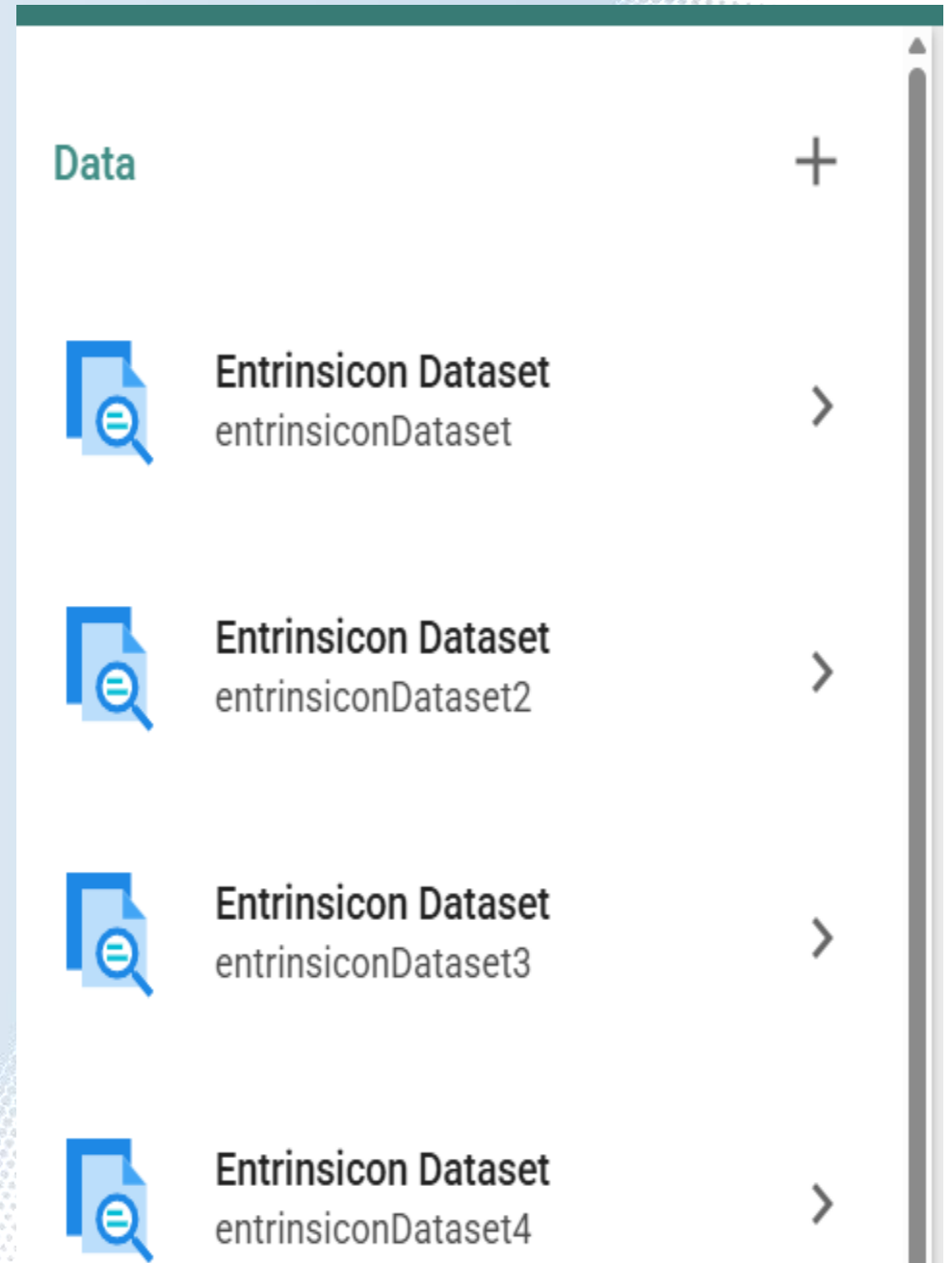
## Job Data element options

- Ad-Hoc (idle time out)
- Dataset static data
- Refresh on Job run



# Data, Data, Data

- ✓ Leveraging Data with only one Dataset Refresh.
- ✓ A Job may have the same data element added multiple times.
- ✓ Where duplicate data elements with various post query filters enable multiple unique Actions with one primary refresh.



# Data Do and Do Not



A screenshot of the Entrinsicon application interface. The top bar is dark green with a pencil icon, the text "Entrinsicon", and buttons for "Draft saved", "CANCEL", and "SAVE". On the left, a sidebar lists datasets under the "Data" section, with the first item "Entrinsicon Dataset entrinsiconDataset" highlighted in a red box. The main area shows the selected dataset with a three-dot menu icon in a red box. A "Dataset Options" dialog box is open, containing two options: "Refresh on Job run" (checked, highlighted in a red box) and "Take Snapshot on Job run" (unchecked). The dialog has "CANCEL" and "APPLY" buttons. At the bottom of the main area, there are "REMOVE" and "DONE" buttons.

# Order of Operations

Order of operations matter! Use them to your advantage.

- **Job assets fire top down**
  - Data
    - Data
    - Data
  - Actions
    - Actions
    - Actions

The screenshot shows a software interface with two main sections: 'Data' and 'Actions'. The 'Data' section is at the top, followed by a horizontal separator line, and then the 'Actions' section. Each item in the list includes an icon, a title, a subtitle, and a right-pointing chevron. The 'Data' section has a '+' icon in the top right corner, and the 'Actions' section has a '+' icon in the top right corner.

| Section | Item                | Icon | Subtitle         | Action |
|---------|---------------------|------|------------------|--------|
| Data    | Entrinsic Dataset   |      | entrinsicDataset | >      |
|         | Entrinsic Ad-Hoc    |      | entrinsicAdHoc   | >      |
| Actions | Save to file system |      | Write 0 files    | >      |
|         | Send an email       |      | 0 recipients     | >      |
|         | Send an email burst |      | Field:           | >      |
|         | Send to FTP         |      | Upload 0 files   | >      |
|         | Export Saved List   |      |                  | >      |

# Actions

## Getting data out of Informer 5.

### When to use one Action over another other.

Save to file system

Send an email

Send an email burst

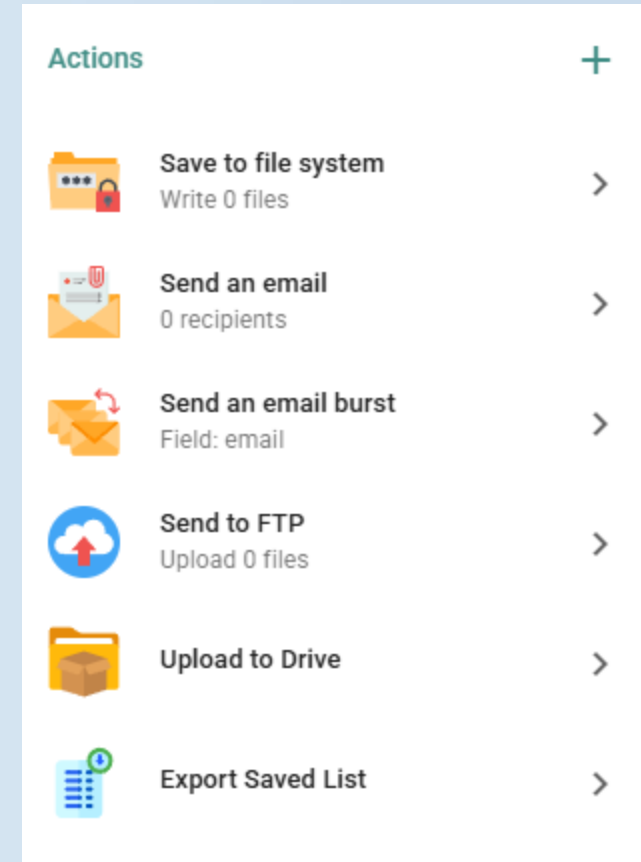
All data

User data

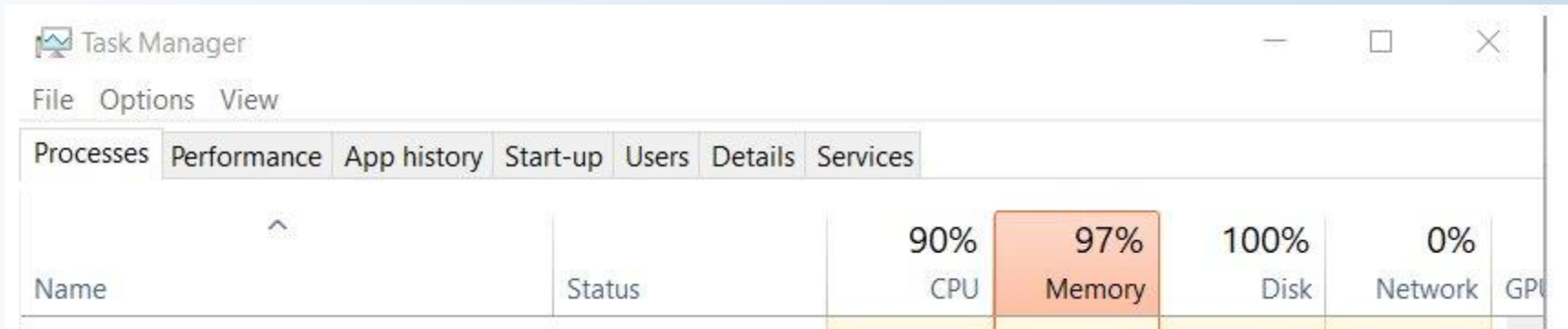
Send to FTP (SFTP, FTPS)

Upload to Drive (OneDrive, Google Drive, Intergration)

Export Saved List (U2)



# Single Job Load



**One Job can do many things, but it shouldn't always.**

**Logically create multiple Jobs based on.**

- **When they need to be delivered**
- **Required Actions for one Query**
- **Long running refreshes**

# When to Run Jobs

Data Need & Changes

Frequency & Off Peak



# When and How Often Should a Job Fire



Simple!

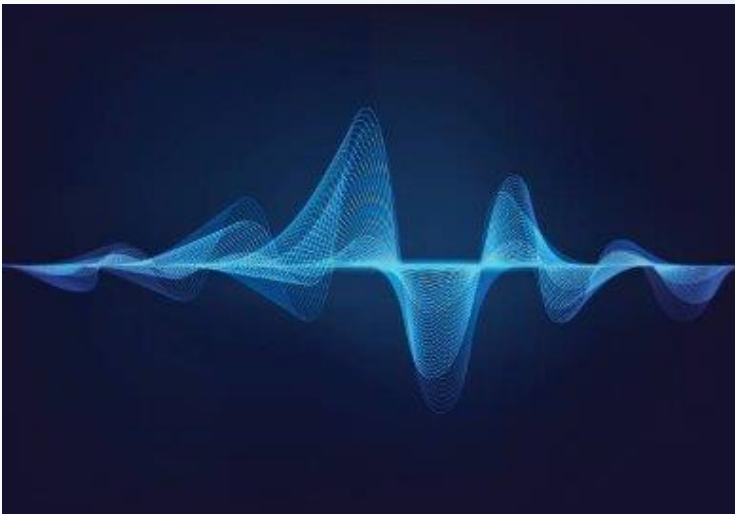
Configure Job run time intervals based on need and when the data is expected to change.

Let's break that down.



# Consideration on When to run Jobs Cont.

## Frequency & Off-Peak



# Considering other Scheduled Jobs



Everyone needs their data, but we can't all get there at the same time. Let's talk spacing fire intervals around other Jobs.



# Long Running Job



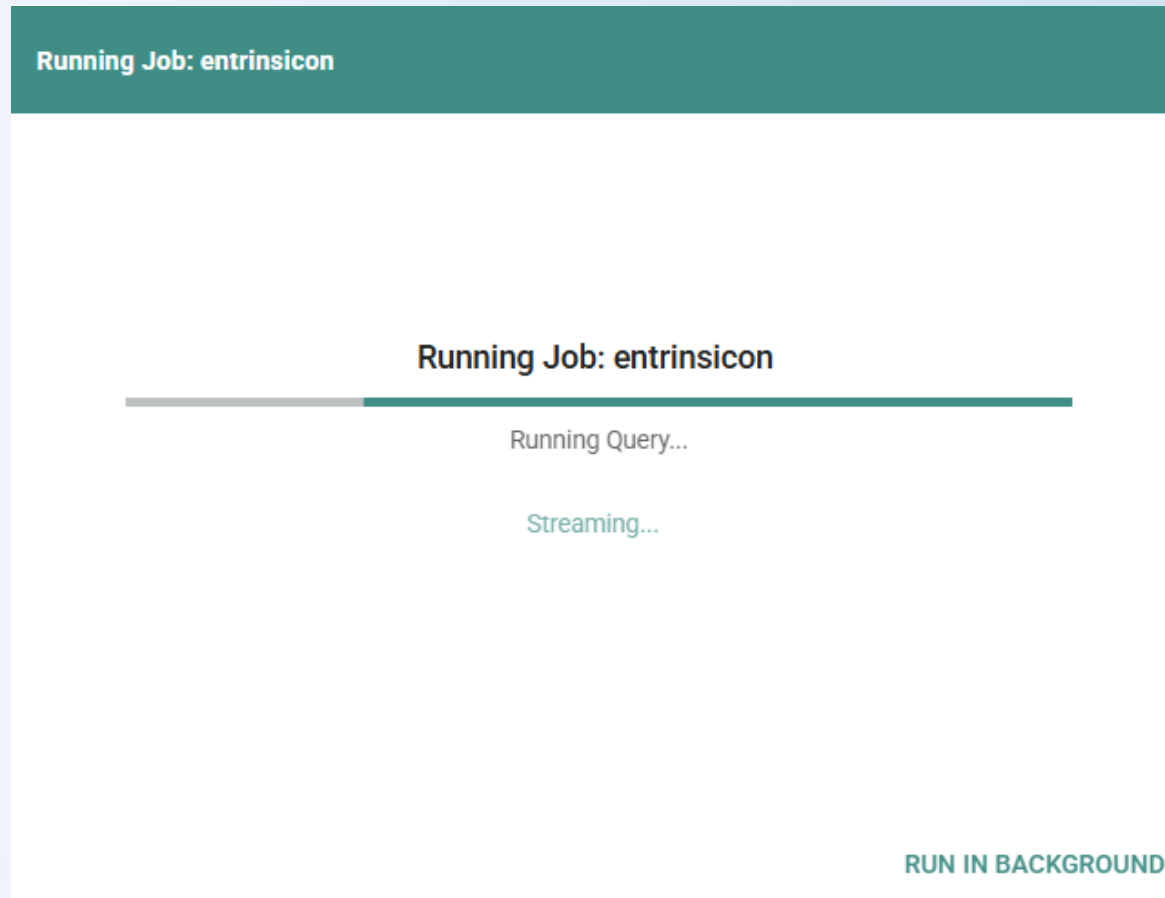
Job duration has a strong correlation to how performantly the Datasource can process the query.

Consider how long they would run at the Datasource console and omit localized performance variables like SQL Views and U2 Virtual fields.

A screenshot of a Datasource console interface. At the top, a dark green header bar contains the text "Running Job: entrinsicon" in white. Below this, the main content area is white and displays "Running Job: entrinsicon" in a large, bold, black font. Underneath, there is a horizontal progress bar consisting of a grey segment on the left and a teal segment on the right. Below the progress bar, the text "Running Query..." is displayed in a smaller, grey font, and "Streaming..." is displayed in a teal font. At the bottom right of the console area, the text "RUN IN BACKGROUND" is visible in a teal font.





# Managed System: Where to Run Long Tasks

Utilize the Job processor for longer-running queries



# Job History



| History                             |  |            |   |  |
|-------------------------------------|--|------------|---|--|
| <input type="text" value="Search"/> |  |            |   |  |
| Started ↓                           | Run by ↓   | Duration ↓ | Result ↓  |  |
| Sep 12, 2023 at 7:30 PM CDT         |  System Administrator | 9.25s      |  |  |
| Sep 12, 2023 at 7:29 PM CDT         |  System Administrator | 9.80s      |  |  |

# History Results



## Job progress



The Job failed. Find the status of each action below.

- Invoking job endpoint**  
Running
- Refreshing data: Northwind Orders Sept...**  
Refreshed 2155 Records
- Exporting northwindOrdersSept.csv**
- Writing Custom text file...**
- Uploading Files...**  
Error: connect ECONNREFUSED 127.0.0.1:21 (control socket)
- Job 'Entrinsic 2023' failed with an error.**  
Error: connect ECONNREFUSED 127.0.0.1:21 (control socket)



# Sorting the Job Page



## Jobs

| Job                   | Tenant  | Status  | Next ...     | Last R... | Runni... | Interval |
|-----------------------|---------|---------|--------------|-----------|----------|----------|
| Auto Snapshot Cleanup | manager | Schedu  | Aug 6, 20... | Succes:   | Daily    |          |
| Auto System Cleanup   | manager | Schedu  | Aug 6, 20... | Succes:   | Daily    |          |
| Index Files           | manager | Disable |              | Never     |          |          |
| Sync Libraries        | manager | Schedu  | Aug 5, 20... | Succes:   | Minutes  |          |
| entrinsic             | manager | Disable |              | Failure   |          |          |

# Job Status



Folder ▼ Tags ▼ Tenants ▼ Status ▼ Last Run ▼ Owner ▼

---

Next ...

|                          |  |           |      |
|--------------------------|--|-----------|------|
| <input type="checkbox"/> |  | Disabled  | 1042 |
| <input type="checkbox"/> |  | Off       | 727  |
| <input type="checkbox"/> |  | Queued    | 74   |
| <input type="checkbox"/> |  | Running   | 3    |
| <input type="checkbox"/> |  | Scheduled | 1152 |

**DONE**

# Jobs a Top-Level Permission



## Set Role and Permissions

This will update the User system role and permissions for Informer.










- Super User  
Administrator access to all parts of the system regardless of Team-based security
- Normal User  
No special privileges outside of Team-based security

- Job Creation  
Ability to create and schedule a Job on accessible content
- Painless Script Creation  
Ability to create a new Dataset Field using Painless scripting
- View all Teams  
Ability to see the list of Teams in the system on the top navigation.
- View all Users  
Ability to see the list of Users in the system on the top navigation.

# System Jobs



## Jobs

| Job                                    |  | Description   |  |
|---|---|---|---|
|  <a href="#">Auto Snapshot Cleanup</a> |   | Permanent Job to automatically purge expired Snapshots. This Job cannot be deleted.               |   |
|  <a href="#">Auto System Cleanup</a>   |   | Permanent Job to automatically purge orphaned and expired index data. This Job cannot be deleted. |   |
|  <a href="#">Index Files</a>           |   | Update file content indices.  |   |
|  <a href="#">Sync Libraries</a>      |   | Synchronize library files with the remote repository  |   |

# Common Challenges and Considerations



- Consider an Interval with a common Schedule Fire time, which can result in unexpected high loads
  - Intervals
    - Hour
    - Daily
    - Weekly
    - Monthly
  - Schedule Fire time
    - 8:00 AM
- Unnecessary Dataset refreshes
- Conflicting refreshes

Questions



# Q&A



## Steven McKinny

Informer 5 Implementation Specialist Tier 2 | [steven@entrinsic.com](mailto:steven@entrinsic.com) | (919) 848-4828 | 7721 Six Forks Road, Suite 100 Raleigh, NC 27615

