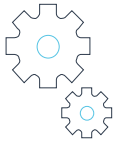
Services and Instances

# Logic Service

## Overview

The Logic Service is designed to run continuously, monitoring automation inputs in real-time, and processing defined business rules to record production information to the TrakSYS database.

- Connects to OPC data sources.
- Monitors and executes logic on a second-by-second basis.
- Must be restarted to load and process new configuration.

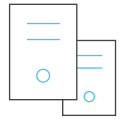


## Instancing

In some cases, it may be desirable to configure and deploy multiple instances of the service...

**Load Distribution**
In very large configurations, the quantity of processing may start to impact the ability of the Logic Service to reliably maintain near real-time scanning.

**Functional Isolation**
To minimize data recording interruptions when new configuration is added to a portion of the implementation, different areas of production can be assigned to different Logic Services.



## Distribution

In some cases, it may be desirable to configure and deploy multiple instances of the service...

**Separate Server**
Logic Services can be deployed to dedicated servers when targeting Load Distribution.

**Same Server**
Multiple Logic Services can be deployed to the same server when targeting Functional Isolation.

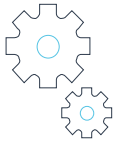
Services and Instances

# Historian Service

## Overview

The Historian Service is designed to run continuously, monitoring automation inputs and recording time-series values to the Historian TrakSYS database.

- Connects to OPC data sources.
- Monitors and records Tag changes based on configured thresholds.
- Must be restarted to load and process new Tag configuration.



## Instancing

In some cases, it may be desirable to configure and deploy multiple instances of the service...

**Load Distribution**
In very large configurations, the quantity of processing may start to impact the ability of the Historian Service to reliably maintain near real-time scanning.

**Functional Isolation**
To minimize data recording interruptions when new configuration is added to a portion of the implementation, different areas of production can be assigned to different Historian Services.

## Distribution

In some cases, it may be desirable to configure and deploy multiple instances of the service...

**Separate Server**
Historian Services can be deployed to dedicated servers when targeting Load Distribution.

**Same Server**
Multiple Historian Services can be deployed to the same server when targeting Functional Isolation.

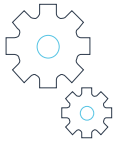
Services and Instances

# Workflow Service

## Overview

The Workflow Service is designed to run continuously, executing and advancing Workflow Process Definitions.

- Connects to OPC data sources.
- Must be restarted to load and execute new Process Definition versions.
- Restarting the service DOES NOT negatively effect Processes that are in-progress.



## Instancing

In some cases, it may be desirable to configure and deploy multiple instances of the service...

**Load Distribution**

In very large configurations, the quantity of processing may start to impact the ability of the Workflow Service to reliably maintain near real-time scanning.

## Distribution

In some cases, it may be desirable to configure and deploy multiple instances of the service...

**Separate Server**

Historian Services can be deployed to dedicated servers when targeting Load Distribution.

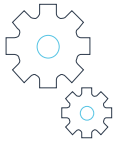
Services and Instances

# Data Management Service

## Overview

The Data Management Service is designed to run and manage several independent Modules, each of which execute periodically or on-demand as triggered from within TrakSYS.

- Typically connects to other business systems via APIs, database connections or file manipulation.
- Modules must individually be restarted to load and execute changes.
- The service DOES NOT need to be restarted for functional reasons.



## Instancing

In some cases, it may be desirable to configure and deploy multiple instances of the service...

**Load Distribution**

When the quantity and workload of Modules is very high, the quantity of processing may start to impact the ability of the Data Management Service to reliably maintain near real-time scanning.

## Distribution

In some cases, it may be desirable to configure and deploy multiple instances of the service...

**Separate Server**

Data Management Services can be deployed to dedicated servers when targeting Load Distribution.

# Same-Server Instancing

## Install and Configure

While the TrakSYS Installation Manager can be used to install a single (first) instance of a Service, installing subsequent instances on the same server requires using a command line call.

In addition, the Host property of the configured Service must include the instance name used during the command line install.

## Steps [ Example for Logic Service ]

1. Execute Command Line (Run as Administrator). Specify an InstanceName.

```
C:\>"C:\Program Files (x86)\Parsec\TrakSYS\LogicManagerService.exe" -install Instance2
```

Services

Installed Services

| Service | Status |
|---|---|
| Logic Service | Running |
| Historian Service | Running |
| Data Management Service | Not Installed |
| Workflow Service | Stopped |
| Maintenance Service | Running |
| TrakSYS Logic Service [Instance2] | Stopped |

2. Verify the new Instance appears in Installation Manager.

Logic Service

General
Advanced
Notes

Name
LS 2

Computer Name
SERVERNAME\Instance2

Scan (Milliseconds)
1000

3. Configure the new Instance using Host = SERVERNAME\InstanceName.