



Web Store and Forward Module User Guide

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Introduction

The Kymera Web Store and Forward module enables efficient Store and Forward functionality between gateways over the web. The use of Google's Protocol Buffer serialization reduces both the space required to store the data and the bandwidth required to forward it.

Usage

After installing the module, you will find Ignition's Configuration tab now includes the **Web Store & Forward** heading. The options available under that tab depend on the license you purchased, **Endpoints** for the Remote License, **Servlet Settings** for the Central License, and both for the Combined License. The module also exposes a series of tags for monitoring the forwarded data.

Remote License

Initially, there are no endpoints configured. Create a new one by clicking **Create new Web S&F Endpoint....** Once it has been created, this endpoint will be available as a History Provider on any tag in the designer. You will also be able to track and manage quarantined data in the gateway similar to Inductive Automation's store and forward connections. The following properties have been exposed for Advanced Users, but the default values are recommended.

Main

Name	The name used to refer to this endpoint / provider.
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Storage

Remote Endpoint	The full url for the remote endpoint. This should include the protocol, address, port, and path. For example: "http://remotegateway:8088/main/system/websf"
Forward Frequency Time	The value that will be reached before the remote's records are forwarded, which coupled with the Forward Frequency Time Units, define the forwarding frequency.
Forward Frequency Time Units	The units of time that, coupled with the Forward Frequency Time, define the forwarding frequency.
Send Amount	The maximum amount of records that will be sent in a single transfer.
Store To Disk Time	The maximum time (in milliseconds) before the records held in the memory buffer will be written to the disk.
Store To Disk Records	Controls the number of records that can accumulate in the memory buffer before records will be written to disk as well as the records that can be forwarded and written to the central database.

Max Memory Records

The maximum number of records that can accumulate in the memory buffer. Records exceeding this value that have not yet been written to disk will be dropped.

Central License

In order for the central machine to act as an endpoint for remote machines the Web Store & Forward Servlet must be enabled with a datasource selected. Simply check the box **Enabled** and select a **Datasource** from your list of database connections and click **Save** for the central machine to begin accepting remote connections to the indicated datasource.

Main

Enabled When checked, the servlet will act as a central endpoint, receiving data forwarded from a remote.

Other

Datasource The database connection, or similar datasource, for received data to be written in.

Combined License

The combined license allows the Ignition Gateway to act as both a remote that can forward to an endpoint, and an endpoint that can receive forwarded data.

WebSF Tags

The following tags are tracked and exposed, enabling simple monitoring of the Web Store and Forward forwards (sends). They can all be found in the [System]Gateway/WebSF folder and are all of Data Type Int4.

[System]Gateway/WebSF

FailedErrorSends	Reports the number of sends that failed due to unexpected errors.
FailedTrialExpiredSends	Reports the number of sends that failed due to an expired trial.
QuarantinedSends	Reports the number of sends that were sent to the quarantine to be handled by a user later.
SuccessfulSends	Reports the number of sends that succeeded.
TotalFailedSends	A convenience tag reporting the total number of failed sends.
TotalSends	A convenience tag reporting the total number of sends.