



Control IO-Link Master

Loading IODD Files

Tech Tip

*This document provides an example of how to load IODD files and use the **IODD Files** page features.*

Overview

This document discusses the following topics:

- Preparing IODD files
- Loading IODD files and reviewing xml file (Page 3)
- Verifying that the correct IODD file is loaded for the IO-Link device (Page 8)

For additional information, the following documents are available:

- [Changing IO-Link Device Parameters with an IODD File](#) - Shows how to use the **IO-Link Device Port** table to change device parameters and reset an IO-Link device to factory defaults.
- [Changing IO-Link Device Parameters Using the ISDU Interface](#) – Shows how to use the **IO-Link Device ISDU Interface** with or without an IODD file. If an IODD is not loaded, you will need the **IO-Link device manufacturers Operators Manual** for the ISDU Block Indexes and Sub-indexes definitions.

Preparing IODD Files

The IO-Link Master provides 15790K of space to store IODD files for your IO-Link devices. You must first download the IODD file from the IO-Link device manufacturer web site for each IO-Link device.

The IO-Link Master can load a zip file or individual files from an IO-Link device manufacturer. Some IO-Link device manufacturers release one zip file for each product. If the zip file contains IODD files for multiple products, the IO-Link Master loads the first .xml file (and supporting images).

If the IO-Link device manufacturer releases IODD files for multiple products, locate the .xml file for your device and zip the .xml file with the Vendor Image and Device Image. If you do not know what images are required, you can zip all of the images and the IO-Link Master ignores the unused images or simply load the .xml file and the IO-Link Master will notify you which images are missing. Optionally, you can open the .xml file and track the image file names associated to the .xml file.

Loading Zip or XML Files

1. If necessary, download the appropriate IODD files from your IO-Link device manufacturer.
2. Click **Attached Devices | IODD Files**.
3. Click the **UPLOAD IODD FILE** button.

The screenshot shows the 'IO-Link Device Description Files' page in the Control IO-Link Master DR-8 EIP web interface. The navigation bar includes 'Home', 'Diagnostics', 'Configuration', 'Advanced', 'Attached Devices', and 'Help'. The 'Attached Devices' menu is active, and the 'IODD FILES' sub-menu is selected. The page displays a table of 'User IODD files' with columns for Vendor, Device, IODD Filename, Vendor Image, Device Image, and Size. Below the table, the 'UPLOAD IODD FILE' button is highlighted with a red box. The interface also shows 'IODD space: 2696K used, 13688K available' and a 'DELETE SELECTED' button.

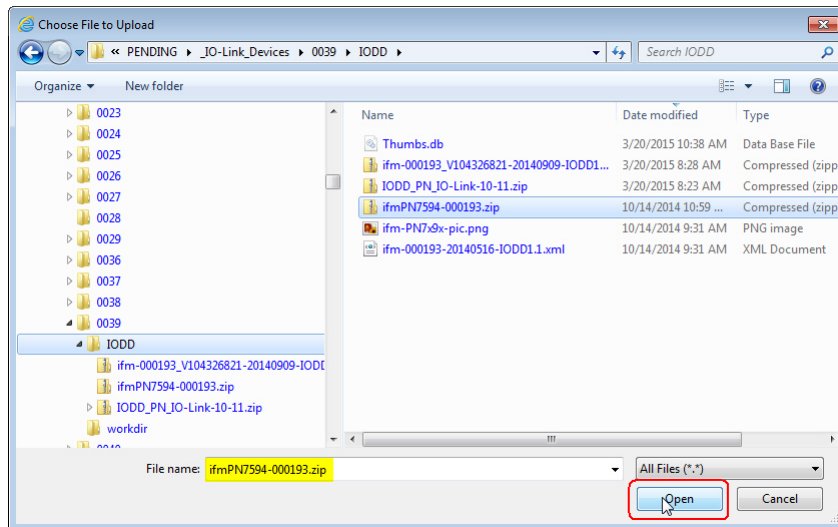
VENDOR	DEVICE	IODD FILENAME	VENDOR IMAGE	DEVICE IMAGE	SIZE	
26	8388696	SICK-OPR20G-RB_17537-20141114-IODD1.1.xml	sick-opr-pic.png	sick-logo.png	176K	<input type="checkbox"/>
87	1247490	wenglor-OY1P303P0102-20140820-IODD1.1.xml	wenglor-oy1p303p0102-pic.png	wenglor-logo.png	147K	<input type="checkbox"/>
888	393746	Balluff-BISM4580450010754-20150407-IODD1.1.xml	balluff-bism458-045-001-07-s4-pic.png	balluff-logo.png	214K	<input type="checkbox"/>
338	4112	Leuze_electronic-CML730_1010-20140505-IODD1.1.xml	leuze_electronic-cml700-pic.png	leuze_electronic-logo.png	653K	<input type="checkbox"/>
451	196609	Banner_Engineering-DF-G1-20120706-IODD1.1.xml	banner_engineering-dfg1-pic.png	banner_engineering-logo.png	132K	<input type="checkbox"/>
419	23	microsonic-bks3fiu-20120627-IODD1.1.xml	microsonic-bks3-pic.png	microsonic-logo.png	212K	<input type="checkbox"/>
1	1050629	Pepperl-Fuchs-LGS-500-20121119-IODD1.0.1.xml	pepperl-fuchs-lgs-pic.png	pepperl-fuchs-logo.png	232K	<input type="checkbox"/>
234	100243	Schmalz-SCPSi_V2-20140829-IODD1.1.xml	schmalz-io-link-scpsi-pic.png	schmalz-logo.png	336K	<input type="checkbox"/>

4. Click the **Browse** button.

The screenshot shows the 'IO-Link Device Description Files' page in the Control IO-Link Master DR-8 EIP web interface. The navigation bar is the same as in the previous screenshot. The 'Browse...' button is highlighted with a red box. The interface also shows 'IODD space: 2696K used, 13688K available' and a 'DELETE SELECTED' button.

VENDOR	DEVICE	IODD FILENAME	VENDOR IMAGE	DEVICE IMAGE	SIZE	
26	8388696	SICK-OPR20G-RB_17537-20141114-IODD1.1.xml	sick-opr-pic.png	sick-logo.png	176K	<input type="checkbox"/>
87	1247490	wenglor-OY1P303P0102-20140820-IODD1.1.xml	wenglor-oy1p303p0102-pic.png	wenglor-logo.png	147K	<input type="checkbox"/>
888	393746	Balluff-BISM4580450010754-20150407-IODD1.1.xml	balluff-bism458-045-001-07-s4-pic.png	balluff-logo.png	214K	<input type="checkbox"/>
338	4112	Leuze_electronic-CML730_1010-20140505-IODD1.1.xml	leuze_electronic-cml700-pic.png	leuze_electronic-logo.png	653K	<input type="checkbox"/>
451	196609	Banner_Engineering-DF-G1-20120706-IODD1.1.xml	banner_engineering-dfg1-pic.png	banner_engineering-logo.png	132K	<input type="checkbox"/>
419	23	microsonic-bks3fiu-20120627-IODD1.1.xml	microsonic-bks3-pic.png	microsonic-logo.png	212K	<input type="checkbox"/>
1	1050629	Pepperl-Fuchs-LGS-500-20121119-IODD1.0.1.xml	pepperl-fuchs-lgs-pic.png	pepperl-fuchs-logo.png	232K	<input type="checkbox"/>
234	100243	Schmalz-SCPSi_V2-20140829-IODD1.1.xml	schmalz-io-link-scpsi-pic.png	schmalz-logo.png	336K	<input type="checkbox"/>

5. Select the zip or xml file to upload, and click **Open**.



6. Click the **UPLOAD** button.

VENDOR	DEVICE	IODD FILENAME	VENDOR IMAGE	DEVICE IMAGE	SIZE	
26	8388696	SICK-OPR20G-RB_17537-20141114-IODD1.1.xml	sick-opr-pic.png	sick-logo.png	176K	<input type="checkbox"/>
87	1247490	wenglor-OY1P303P0102-20140820-IODD1.1.xml	wenglor-oy1p303p0102-pic.png	wenglor-logo.png	147K	<input type="checkbox"/>
888	393746	Balluff-BISM4580450010754-20150407-IODD1.1.xml	balluff-bism458-045-001-07-s4-pic.png	balluff-logo.png	214K	<input type="checkbox"/>
338	4112	Leuze_electronic-CML730_1010-20140505-IODD1.1.xml	leuze_electronic-cml700-pic.png	leuze_electronic-logo.png	653K	<input type="checkbox"/>
451	196609	Banner_Engineering-DF-G1-20120706-IODD1.1.xml	banner_engineering-dfg1-pic.png	banner_engineering-logo.png	132K	<input type="checkbox"/>
419	23	microsonic-bks3fu-20120627-IODD1.1.xml	microsonic-bks3-pic.png	microsonic-logo.png	212K	<input type="checkbox"/>
1	1050629	Pepperl-Fuchs-LGS-500-20121119-IODD1.0.1.xml	pepperl-fuchs-lgs-pic.png	pepperl-fuchs-logo.png	232K	<input type="checkbox"/>
234	100243	Schmalz-SCPS1_V2-20140829-IODD1.1.xml	schmalz-io-link-scpsi-pic.png	schmalz-logo.png	336K	<input type="checkbox"/>

- If necessary, click **Ok** to the following message. The IO-Link Master loads only the files required and may issue a message like this to report ignored (not required by the corresponding xml file) or missing files:

The screenshot shows the 'IO-Link Device Description Files' page. A table lists various IODD files. An 'Upload' dialog box is open, displaying a success message and a list of potential problems. The 'Ok' button is highlighted with a red box.

VENDOR	DEVICE	IODD FILENAME	VENDOR IMAGE	DEVICE IMAGE	SIZE	
26	8388696	SICK-OPR20G-RB_17537-20141114-IODD1.1.xml	sick-opr-pic.png	sick-logo.png	176K	<input type="checkbox"/>
87	1247490	wenglor-OY1P303P0102-20140820-IODD1.1.xml	wenglor-oy1p303p0102-pic.png	wenglor-logo.png	147K	<input type="checkbox"/>
888	393746	Balluff-BISM4580450010754-20150407-IODD1.1.xml	balluff-bism458-045-001-07-s4-pic.png	balluff-logo.png	214K	<input type="checkbox"/>
338	4112	Leuze_electronic-CML730_1010-20140505-IODD1.1.xml	leuze_electronic-cml700-pic.png	leuze_electronic-logo.png	653K	<input type="checkbox"/>
451	196609	Banner_Engineering-DF-G1-20120706-IODD1.1.xml	banner_engineering-dfg1-pic.png	banner_engineering-logo.png	132K	<input type="checkbox"/>
419	23	microsonic-bks3fiu-20120627-IODD1.1.xml	microsonic-bks3-pic.png	microsonic-logo.png	212K	<input type="checkbox"/>
1	1050629	Pepperl-Fuchs-LGS-500-20121119-IODD1.0.1.xml	pepperl-fuchs-lgs-pic.png	pepperl-fuchs-logo.png	232K	<input type="checkbox"/>
234	100243	Schmalz-SCPSi_V2-20140829-IODD1.1.xml	schmalz-io-link-scpsi-pic.png	schmalz-logo.png	336K	<input type="checkbox"/>
310	403	ifm-000193-20140516-IODD1.1.xml	ifm-pn70-pic.png	ifm-logo.png	93K	<input type="checkbox"/>

The IODD file is missing the Vendor Image. Go to the next subsection if you need to load an image file.

- Click the IODD FILENAME to view the .xml file.

The screenshot shows the 'IO-Link Device Description Files' page. The 'User IODD files' table is displayed. The filename 'ifm-000193-20140516-IODD1.1.xml' is highlighted with a red box, indicating it is the file being viewed.

VENDOR	DEVICE	IODD FILENAME	VENDOR IMAGE	DEVICE IMAGE	SIZE	
26	8388696	SICK-OPR20G-RB_17537-20141114-IODD1.1.xml	sick-opr-pic.png	sick-logo.png	176K	<input type="checkbox"/>
87	1247490	wenglor-OY1P303P0102-20140820-IODD1.1.xml	wenglor-oy1p303p0102-pic.png	wenglor-logo.png	147K	<input type="checkbox"/>
888	393746	Balluff-BISM4580450010754-20150407-IODD1.1.xml	balluff-bism458-045-001-07-s4-pic.png	balluff-logo.png	214K	<input type="checkbox"/>
338	4112	Leuze_electronic-CML730_1010-20140505-IODD1.1.xml	leuze_electronic-cml700-pic.png	leuze_electronic-logo.png	653K	<input type="checkbox"/>
451	196609	Banner_Engineering-DF-G1-20120706-IODD1.1.xml	banner_engineering-dfg1-pic.png	banner_engineering-logo.png	132K	<input type="checkbox"/>
419	23	microsonic-bks3fiu-20120627-IODD1.1.xml	microsonic-bks3-pic.png	microsonic-logo.png	212K	<input type="checkbox"/>
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310	403	ifm-000193-20140516-IODD1.1.xml	ifm-pn70-pic.png	ifm-logo.png	93K	<input type="checkbox"/>

- If desired, review the IODD file.

Click the hyperlink to view the xml file in your browser. Optionally, save the IODD file to alternate location.

```
<?xml version="1.0" encoding="utf-8"?>
<IODevice xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.io-link.com/IODD/2010/10"
xsi:schemaLocation="http://www.io-link.com/IODD/2010/10
IODD1.1.xsd">
  <DocumentInfo version="V1.04.326819" releaseDate="2014-05-16"
copyright="Copyright 2014, Builder: 2.3.3.7, Time: 04:02:49" />
  <ProfileHeader>
    <ProfileIdentification>IO Device
Profile/ProfileIdentification>
    <ProfileRevision>1.1</ProfileRevision>
    <ProfileName>Device Profile for IO Devices</ProfileName>
    <ProfileSource>IO-Link Consortium</ProfileSource>
    <ProfileClassID>Device</ProfileClassID>
    <ISOL5745Reference>
      <ISOL5745Part>1</ISOL5745Part>
      <ISOL5745Edition>1</ISOL5745Edition>
    <ProfileTechnology>IODD</ProfileTechnology>
  </ISOL5745Reference>
</ProfileHeader>
<ProfileBody>
  <DeviceIdentity vendorId="310" vendorName="ifm electronic
gmbh" deviceId="403">
    <VendorText textId="TI_VendorText" />
    <VendorUrl textId="TI_VendorUrl" />
    <VendorLogo name="ifm-Logo.png" />
    <DeviceName textId="TI_DeviceName" />
    <DeviceFamily textId="TI_DeviceFamily" />
  </DeviceIdentity>
</ProfileBody>
</IODevice>
```

Loading an Image File

Use this procedure to load an image file for a corresponding xml file.

- Select the row for which the image is missing and click the **UPLOAD IODD FILE** button.

IO-Link Device Description Files

User IODD files (click filename to view) Missing files listed in red

VENDOR	DEVICE	IODD FILENAME	VENDOR IMAGE	DEVICE IMAGE	SIZE	
26	8388696	SICK-OPR20G-RB_17537-20141114-IODD1.1.xml	sick-opr-pic.png	sick-logo.png	176K	<input type="checkbox"/>
87	1247490	wenglor-OY1P303P0102-20140820-IODD1.1.xml	wenglor-oy1p303p0102-pic.png	wenglor-logo.png	147K	<input type="checkbox"/>
888	393746	Balluff-BISM4580450010754-20150407-IODD1.1.xml	balluff-bism458-045-001-07-s4-pic.png	balluff-logo.png	214K	<input type="checkbox"/>
338	4112	Leuze_electronic-CML730_1010-20140505-IODD1.1.xml	leuze_electronic-cml700-pic.png	leuze_electronic-logo.png	653K	<input type="checkbox"/>
451	196609	Banner_Engineering-DF-G1-20120706-IODD1.1.xml	banner_engineering-dfg1-pic.png	banner_engineering-logo.png	132K	<input type="checkbox"/>
419	23	microsonic-bks3fiu-20120627-IODD1.1.xml	microsonic-bks3-pic.png	microsonic-logo.png	212K	<input type="checkbox"/>
1	1050629	Pepperl-Fuchs-LGS-500-20121119-IODD1.0.1.xml	pepperl-fuchs-lgs-pic.png	pepperl-fuchs-logo.png	232K	<input type="checkbox"/>
234	100243	Schmalz-SCPSi_V2-20140829-IODD1.1.xml	schmalz-io-link-scpsi-pic.png	schmalz-logo.png	336K	<input type="checkbox"/>
310	403	ifm-000193-20140516-IODD1.1.xml	ifm-pn70-pic.png	ifm-logo.png	93K	<input type="checkbox"/>

UPLOAD IODD FILE IODD space: 2789K used, 13595K available DELETE SELECTED

Standard IO-Link Definitions

Welcome Admin © Copyright Control Corp.

- Click the **Browse...** button and navigate to the file location.
- Highlight the missing image and click the **Open** button.

4. Click the **UPLOAD** button.

The screenshot shows the 'IO-Link Device Description Files' page in the Control IO-Link Master. The page has a navigation bar with 'CONTROL' logo and tabs for 'Home', 'Diagnostics', 'Configuration', 'Advanced', 'Attached Devices', and 'Help'. The user is logged in as 'IO-Link Master DR-8-EIP'. Below the navigation bar, there are tabs for 'IODD FILES', 'SUMMARY', and 'PORT 1' through 'PORT 8'. The main content area is titled 'IO-Link Device Description Files' and contains a section for 'User IODD files (click filename to view)'. A table lists various IO-Link devices with columns for Vendor, Device, IO-Link File Name, Vendor Image, Device Image, Size, and a checkbox. The file 'ifm-pn70-pic.png' is highlighted in yellow, and its checkbox is checked. Below the table, there is a file selection area with a 'Browse...' button, an 'UPLOAD' button (circled in red), and a 'CANCEL' button. A 'DELETE SELECTED' button is also present. The footer of the page shows 'Welcome Admin' and '© Copyright Control Corp.'.

VENDOR	DEVICE	IODD FILENAME	VENDOR IMAGE	DEVICE IMAGE	SIZE	
26	8388696	SICK-OPR20G-RB_17537-20141114-IODD1.1.xml	sick-opr-pic.png	sick-logo.png	176K	<input type="checkbox"/>
87	1247490	wenglor-OY1P303P0102-20140820-IODD1.1.xml	wenglor-oy1p303p0102-pic.png	wenglor-logo.png	147K	<input type="checkbox"/>
888	393746	Balluff-BISM4580450010754-20150407-IODD1.1.xml	balluff-bism458-045-001-07-s4-pic.png	balluff-logo.png	214K	<input type="checkbox"/>
338	4112	Leuze_electronic-CML730_1010-20140505-IODD1.1.xml	leuze_electronic-cml700-pic.png	leuze_electronic-logo.png	653K	<input type="checkbox"/>
451	196609	Banner_Engineering-DF-G1-20120706-IODD1.1.xml	banner_engineering-dfg1-pic.png	banner_engineering-logo.png	132K	<input type="checkbox"/>
419	23	microsonic-bks3fiu-20120627-IODD1.1.xml	microsonic-bks3-pic.png	microsonic-logo.png	212K	<input type="checkbox"/>
1	1050629	Pepperl-Fuchs-LGS-500-20121119-IODD1.0.1.xml	pepperl-fuchs-lgs-pic.png	pepperl-fuchs-logo.png	232K	<input type="checkbox"/>
234	100243	Schmalz-SCPSi_V2-20140829-IODD1.1.xml	schmalz-io-link-scpsi-pic.png	schmalz-logo.png	336K	<input type="checkbox"/>
310	403	ifm-000193-20140516-IODD1.1.xml	ifm-pn70-pic.png	ifm-logo.png	93K	<input checked="" type="checkbox"/>

The image file is now loaded.

The screenshot shows the 'IO-Link Device Description Files' page after the file upload. The 'UPLOAD IODD FILE' button is now visible at the bottom left of the table area. The 'ifm-pn70-pic.png' file is still highlighted in yellow, but its checkbox is now unchecked. The 'DELETE SELECTED' button is still present. The footer of the page shows 'Welcome Admin' and '© Copyright Control Corp.'.

VENDOR	DEVICE	IODD FILENAME	VENDOR IMAGE	DEVICE IMAGE	SIZE	
26	8388696	SICK-OPR20G-RB_17537-20141114-IODD1.1.xml	sick-opr-pic.png	sick-logo.png	176K	<input type="checkbox"/>
87	1247490	wenglor-OY1P303P0102-20140820-IODD1.1.xml	wenglor-oy1p303p0102-pic.png	wenglor-logo.png	147K	<input type="checkbox"/>
888	393746	Balluff-BISM4580450010754-20150407-IODD1.1.xml	balluff-bism458-045-001-07-s4-pic.png	balluff-logo.png	214K	<input type="checkbox"/>
338	4112	Leuze_electronic-CML730_1010-20140505-IODD1.1.xml	leuze_electronic-cml700-pic.png	leuze_electronic-logo.png	653K	<input type="checkbox"/>
451	196609	Banner_Engineering-DF-G1-20120706-IODD1.1.xml	banner_engineering-dfg1-pic.png	banner_engineering-logo.png	132K	<input type="checkbox"/>
419	23	microsonic-bks3fiu-20120627-IODD1.1.xml	microsonic-bks3-pic.png	microsonic-logo.png	212K	<input type="checkbox"/>
1	1050629	Pepperl-Fuchs-LGS-500-20121119-IODD1.0.1.xml	pepperl-fuchs-lgs-pic.png	pepperl-fuchs-logo.png	232K	<input type="checkbox"/>
234	100243	Schmalz-SCPSi_V2-20140829-IODD1.1.xml	schmalz-io-link-scpsi-pic.png	schmalz-logo.png	336K	<input type="checkbox"/>
310	403	ifm-000193-20140516-IODD1.1.xml	ifm-pn70-pic.png	ifm-logo.png	93K	<input type="checkbox"/>

Verifying that the Correct IODD Files Loaded

The IO-Link Master can verify that the correct IODD files for a product have loaded using the **Summary** page.

1. Click **Attached Devices | Summary**.
2. Verify that the port that the device is connected to displays an xml file name in the **IODD Name** field, as illustrated in this image. Notice that Ports 1 and 4 do not have IODD files loaded.

IO-Link Device Configuration Summary ⓘ

DEVICE SETTINGS	PORT1	MORE	PORT2	MORE	PORT3	MORE	PORT4	MORE	PORT5
Vendor Name	SICK AG		BALLUFF		SICK AG		BALLUFF		wenglor sensoric Gm
VENDOR	26		888		26		888		87
DEVICE	8388707		393746		8388696		393729		1247490
Description									
IO-Link Version	1.0		1.1		1.1		1.1		1.1
Hardware Version	1.00		V1.00		1.00		V1.20		Version V01.00.00
Firmware Version	1.07		V1.70		V1.00.001.963		V1.70		Version V01.02.00
Baud Rate	38400		38400		38400		38400		38400
SIO Mode	Yes		No		Yes		No		Yes
Min Cycle Time	2.3 ms		8.8 ms		2.3 ms		8.8 ms		2.3 ms
IODD Name			Balluff-BISM4580450010754-20150407-IODD1.1.xml		SICK-OPR20G-RB_17537-20141114-IODD1.1.xml				wenglor-OY1P303P0140820-IODD1.1.xml
Serial Number	15050031				15080029				590003365

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