AX Microsmart TCP Driver User Guide

Microsmart TCP Driver User Guide

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Chapter

Installation

Install ibmsMsTCP.jar on the computer where Niagara AX Workbench will run. To install, place a copy of the file in the modules directory of your Niagara AX installation. This is typically C:\Niagara\Niagara-3.n.nn\modules.

Install ibmsMsTCP module on the target station. Using a Niagara AX workbench where the module has already been installed, connect to the stations platform service. Go to the software manager and install ibmsMsTCP.

Apart from installing the 3.*n.nn* version of the Niagara distribution files in the JACE, make sure to install the *ibmsMsTCP* module too (if not already present, or upgrade if an older revision). For more details, see "About the Commissioning Wizard" in the JACE Niagara AX Install and Startup Guide.

Following this, the station is now ready for Microsmart software integration, as described in the rest of this document.

Requirement

AX workbench version

- AX workbench 3.6 and higher.
- TCP Ethernet Port connection.
- AX platform support:
 - 1. Web Supervisor.
 - 2. Soft JACE.
 - 3. JACE 2xx.
 - 4. JACE 4xx.
 - 5. JACE 5xx.
 - 6. JACE 6xx.
 - 7. JACE 7xx.

Microsmart support controller

The Microsmart driver provides the components necessary to integrate Microsmart controllers. This document assumes that the reader has some familiarity with Robertshaw product.

The purpose of this guide is to help field experts integrate Microsmart controllers. This guide assumes that the reader has extensive knowledge about the Microsmart.

| Part No | Description | Firmware Revision | | | |
|--------------------------|---------------------------------|-------------------|--|--|--|
| MSC-MPC-001 | L11 MPC | 11.2H | | | |
| MSC-P1501/1502/1503/1504 | L11 Unit Controller | 11.3A | | | |
| MSC-L1000 | Lighting Controller | 11.2H | | | |
| MSC-P-751/752/753/754 | L11 Unit Controller | 11.2H | | | |
| MN-MSI | Micronet Integrator Microsmart | 11.1T | | | |
| MSC-V-751/752/753/754 | L11 VAV Controller | 11.2H | | | |
| MSC-V-511/512/521/522 | L11 VAV Controller | 11.2H | | | |
| MSC-MPC | L11 Multi Purpose Controller | 10.3 | | | |
| MSC-U1000 | L10 Enhanced Unit Controller | 10.4C | | | |
| MSC-P2000 | L10 Enhanced Medium PUC | 10.1 | | | |
| MSC-P1000 | L10 Enhanced Low PUC | 10.1 | | | |
| MSC-V50x | L10 VAV Terminal Controller | 10.4D | | | |
| MSC-GPC | L9 General Purpose Controller | 9.4C | | | |
| MSC-IOC | L9 Input/Output Controller | 9.4C | | | |
| MSC-P-100 | L9 Low PUC | 9.4C | | | |
| MSC-P-200 | L9 Medium PUC | 9.4C | | | |
| MSC-T-100 | L9 Temperature Controller | 9.4C | | | |
| MSC-V-100/V110 | L9 VAV Terminal Unit Controller | 9.4C | | | |
| MSC-V-200 | L9 VAV Terminal Unit Controller | 9.4C | | | |
| MSC-UC | L9 Unit Controller | 9.4C | | | |
| MSC-V-300 | L9 VAV Terminal Unit Controller | 9.3 | | | |

The Microsmart Driver supports the following directly connected products:

Note: The firmware revisions listed above were validated with this driver. Other versions may function correctly but were not tested. If difficulties are experience.

Connection network topology

Below is a figure Microsmart controller Network topology.

Options 1 - (Microsmart AX driver will install at the Web Supervisor/Soft-JACE and communicate direct to the MIG-112 gateway controller).





Options 2 - (Microsmart AX driver will install at the JACE and communicate to the MIG-112 gateway controller).

Note : Level 9 Microsmart controllers cannot be addressed above address 62. The Level 9 Microsmart controllers must reside on the first 62 addresses. They will not communicate above address 62. This is a Level 9 Microsmart device limitation. If more than 62 Level 9 Microsmart devices exist, break up the network into two trunks and use two Microsmart drivers and RS-485 trunks.

Note: It is acceptable to have a combination of up to 124 controllers on a single network but any controller above address 62 must be either Level 10 or Level 11.

Chapter

MIG-112 Configuration

This section provides a collection of procedures to configure the MIG-112 setting.

Default IP address

- By the default from the factory the IP address is "192.168.10.11".
- User may require to change the default IP address to suite the network requirement. To take effect the changes MIG-112 controller required to reboot.
- Run the web browser from the computer and key in the MIG-112 controller IP address with login the user name and password as below:-

Address : <u>http://192.168.10.11</u> User : user Password : pass

Change IP address

• After login to the MIG-112 web browser go to the "Network" tab, change the desire IP address and press the button "Submit". Finally reboot the MIG-112 to take effect.

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| 🖬 Serial | IP address: | HTTPS 443 | |
| 📥 Microsmart 🔹 | Subnet mask: | FTP | |
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| | Copyright © 2014-2016 MaxLine Solutions Ltd. All rights reserved. | | v2.1 |

Firmware verification

• Before integrate to the Microsmart system please make sure the MIG-112 has install the correct "apps driver", see the highlight as below "Microsmart TCP Gateway".

• Other than the "Microsmart TCP Gateway" the controller is required to update/install the correct firmware file.



RS485-D1/RS485-D2

• MIG-112 controller has 2x RS485 port make sure before mapping the TCP port user has selected to the correct RS485 port.

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AX TCP Port mapping

- This information is part of the Niagara AX integration software packet will transmit and receive from the specific RS485 port.
- MIG-112 controller
 - TCP Port 5120 = RS485-D1
 - TCP Port 5121 = RS485-D2

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| 📥 Microsmart | < | AX | Socket idle timeout: (1 - 10) minute | | | | | - 1 |
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| O Channel 1 | | | Client IP address: | | | | | - 1 |
| O Channel 2 | | | □ 0.0.0.0 | | | | | |
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| | | Tunnel | | | | | | - |
| | | | Trace Tunnel: O True ® False | | | | | |

OPRIF/Tunnel TCP Port mapping

- This information is part of the OPRIF software packet will transmit and receive from the specific RS485 port.
- MIG-112 controller
 - TCP Port 6120 = RS485-D1
 - TCP Port 6121 = RS485-D2

AX MICROSMART TCP DRIVER USER GUIDE

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Chapter

3

Quick Start

- Follow the installation and configuration instructions preceding this.
- This driver is running with ethernet Port.
- Open the ibmsMsTCP palette and find the MsTCPNetwork object.
- Paste an MsTCPNetwork object under the driver's node in your station.
 - Edit the IP address properties as needed. By default the MIG-112/FG-20 IP address is 192.168.10.11 and the Ethernet port is 5120.
 - If working with the MIG-112 controller model, there were 2x RS485 available, by default the IP address is 192.168.10.11 and the Ethernet port is 5120 for the RS485-D1 and 5121 for the RS485-D2.
 - If you have more than one MIG-112 controller add the MsTCPNetwork and fill the IP address with the correct TCP port.

Note : Only one(1) TCP connection port available for the gateway controller. Multiple MsTCPNetwork connect to the same TCP port e.g. 5120 will not work.

- Open the MsTCPDeviceManager view by double-clicking the MsTCPNetwork object just added to the station.
 - Add the Microsmart device and setup the address or user use discover device option.
- Once a device is added, navigate to the "points" folder under the device and double click the point's folder to display the MsPointManager view.
 - Press the "Discover" button.
 - Select and add Microsmart points to your database.

Microsmart Component Guide

- MsTCPNetwork
- MsDevice
- MsProxyExt

MsTCPNetwork

The MsTCPNetwork provides all the configuration parameters necessary to allow the driver to communicate with a network of Microsmart devices. The MsTCPNetwork can be thought of as the "host" Microsmart device in network of Microsmart devices.

The MsNetwork is the "network-level" component in the NiagaraAX architecture. It has the standard network component properties such as status and enabled (see "Driver Architecture / Common network components" in the NiagaraAX Users Guide for more information), as well as properties unique to operation as a host in a Microsmart system.

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NOTE: In the following properties, the properties are inherited from the base AX driver classes, and as such are only touched on here. For a full explanation, refer to the AX Driver Architecture document.

- Enabled Enables or Disables the Microsmart Driver
- Monitor container for monitor (ping) properties.
- Tuning Policies A container for tuning policies which determines how and when proxy points are read and written.
- Poll Scheduler The basic poll scheduler enables/disables polling, determines the fast/normal/slow poll rates, and maintains statistics about proxy extension polls.
- Response Timeout Specifies the maximum time to wait for a response to a Microsmart message is sent. If a response is not received before the timeout.
- Retry Count specifies the maximum retry count if the data not response from the MIG-112 controller.

MsLxxDevice

The MsLxxDevice provides all the configuration parameters necessary to allow the driver to communicate with a given Microsmart device. The MsLxxDevice are always children of an MsTCPNetwork. MsLxxDevice also serve as a container for all of the data points that need to be polled for data.

The MsLxxDevice is the "device-level" component in the NiagaraAX architecture.

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NOTE: In the following properties, the properties are inherited from the base AX driver classes, and as such are only touched on here. For a full explanation, refer to the AX Driver Architecture document.

- Status The status of the device. Will normally be {ok}. A value of {down} indicates that the last ping to the device was not answered (the "Report Exception Message" is used as the ping message).
- Enabled Enables or Disables communication to the associated device from Microsmart Driver.
- Fault Cause if the "Status" property value is {fault}, the fault cause is displayed here.
- Heath contains metadata about the health of this device on the network:

- Down indicates if this device is down should be false under normal operation.
- Alarm indicates if this device is in alarm should be false under normal operation
- Last OK Time the last time of successful communication to this device
- Last Fail Time the last time of unsuccessful communication to this device
- Last Fail Cause the reason of the last comm. Failure (example "bad checksum) .
- Alarm Source Info configuration items for alarms generated from the ping process (device up and device down events)
- Address Microsmart device Address, this must be in unique number.
- Controller Type describe the model type of the controller. See *page 2* for more detail.
- Revision describe the revision of the firmware. See *page 2* for more detail.
- Model describe the model type of the controller. See *page 2* for more detail.
- Points a container for all data items in this device which need to be polled for data.

MsProxyExt

The MsProxyExt types take on the readable-writable personality of the control point they are attached to. For example, an MsProxyExt, when used as an extension on a NumericPoint has "read only" functionality, but when used on as an extension on a NumericWritable can read and write the attribute values.

The MsProxyExt types are the "point-level" component in the NiagaraAX architecture.

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NOTE: In the following properties, the properties are inherited from the base AX driver classes, and as such are only touched on here. For a full explanation, refer to the AX Driver Architecture document.

- Status The status of the device. Will normally be {ok}. A value of {down} indicates that the last ping to the device was not answered (the "Report Exception Message" is used as the ping message).
- Fault Cause if the "Status" property value is {fault}, the fault cause is displayed here.
- Enabled Enables or Disables communication to the associated device from Microsmart Driver
- Device Facets contains metadata about the health of this device on the network:
- Conversion
- Tuning Policy Name
- Read Value
- Write Value

- Poll Frequency the frequency to poll this point in the controller. Choices are either fast/normal/slow. Fast/Norma/Slow rates are determined by the "Poll Scheduler" property on the MsNetwork component.
- Point Name, Point Number, Point Type, and Element re-present the identification for the Microsmart point to communicate from the Microsmart devices.

Ms Proxy Ext Element

- Value the current value of the point.
- Cond the current value if the condition element of the point.
- Stwd the current value of the point state word. This is a bit map with the following bit definition (disconnect, permanent inhibit, time inhibit, loop override, reverse acting, auto tune and local mode).
- Stats A formatted string that re presents the current status of the point.
- Alarm the current alarm state of the point.
- Log this output typically link to a as DMS point. The JACE will acting as DMS controller. This can be use to sending the value directly to Ms device. Mostly use for controller level 9 that do not have the point element and the Microsmart controller think that the DMS available in the network.

Ms View

- Ms Device Manager
- Ms Point Manager
- Ms UDP Manager
- Ms Global Data

Ms Device Manager

The Ms Device Manager is the default view when you double-click on a Ms TCP Network in the Nav tree. This manager view provides a quick and easy way to display.

The Ms Device Manager is the default view for any Ms Network container. The Ms Device Manager is a table-based view, where each row represents a unique device. When building a network in the station, you use this view to create, edit, and delete device-level components. Below is an example Ms Device Manager view.

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The view above shows a typical Ms Device Manager view.

The "New Folder", "New", and "Edit" buttons are not unique to the Ms Device Manager, and are explained in the "Niagara AX User's Guide" in the "Driver Architecture" section. The "Match" button is not used for the Ms Driver.

You can now discover the devices to the station database by clicking the "Discover" button.

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If any devices are a live and giving a response while discovering in progress the device will automatically added at the Discovered table.

Select the device at the Discovered table or use drag and drop from the Discovered table to Database table and this will automatically bring up the new Dialog, this is commonly done for re-editing items like data addresses, names, or facets.

Ms Point Manager

The Ms Point Manager is the default view when you double-click on a "points" folder (a MsPointDeviceExt type folder) under a MsDevice in the Nav tree. This manager view provides a quick and easy way to display and learn Ms points in a Ms device.

The Ms Point Manager is the default view for any MsPointDeviceExt container. The Ms Point Manager is a table-based view, where each row represents a unique Ms point within a device. Below is an example Ms Point Manager view.

| # | | | WorkPlace | AX | | | | - 🗆 | × |
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| v 🖾 Nav [| Diatform | 🔊 Points 🔊 Poin | ts 🔞 Drivers/Ms | TCPNetwork1 | 1 | | | N | 8 |
| 🖸 🐟 💿 🧑 My Network 👻 | | <u> </u> | . | | | | | | |
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| 田 🎬 Services | Name | Туре | Out | Point Name | Point Number | Point Type | Element | Tuning Policy Name | Fault 🚌 |
| 🕀 🖼 Drivers | AHU8-1S | S Boolean Writable | true {ok} @ def | AHU8-1SS | 1 | SS | STATS | defaultPolicy | |
| Et C NiagaraNetwork | AHU8-2S | S Boolean Writable | true {ok} @ def | AHU8-2SS | 2 | SS | STATS | defaultPolicy | |
| | AHU8-1SI | . Boolean Writable | true {ok} @ def | AHU8-1SL | 3 | SL | STATS | defaultPolicy | |
| | AHU8-1L9 | Boolean Writable | false {ok} @ def | AHU8-1LS | 4 | LS | STATS | defaultPolicy | |
| | AHU8-12 | S Boolean Writable | true {ok} @ def | AHU8-12S | 5 | 2S | STATS | defaultPolicy | |
| I III MSC DEVC | AHU8-12 | . Boolean Writable | true {ok} @ def | AHU8-12L | 6 | 2SL | STATS | defaultPolicy | |
| ⊞ 🔜 SLV-V11 | AHU8-1A | Numeric Point | 25.3 {ok} | AHU8-1AI | 7 | AI | STATS | defaultPolicy | |
| 🗄 🧰 MsTCPNetwork2 | AHU8-1A | Boolean Point | false {ok} | AHU8-1AL | 8 | AL | STATS | defaultPolicy | |
| 🗄 🗱 Apps | AHU8-15 AHU8-15 | F Boolean Point | false {ok} | AHU8-1ST | 9 | ST | STATS | defaultPolicy | |
| Files | 🔵 🔘 AHU8-1A | P Numeric Writable | nan {ok} @ def | AHU8-1AP | 11 | AP | STATS | defaultPolicy | |
| ⊞ 2 History | AHU8-1M | C Numeric Point | 0.0 {ok} | AHU8-1MC | 12 | MC | STATS | defaultPolicy | |
| E = 10 20 11 227 (CcmClient) | AHU8-1LF | P Numeric Point | 0.0 {ok} | AHU8-1LP | 13 | LP | STATS | defaultPolicy | |
| | AHU8-1A | O Numeric Point | 80.0 {ok} | AHU8-1AO | 10 | AO | STATS | defaultPolicy | |
| → ④ Palette | | | | | | | | | |
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| 🕀 🕞 MsDeviceFolder | - | New Folder | New 😥 🛛 | Edit 🎆 | Discover | 📀 Cancel | () Ac | dd 🔮 Match | |
| | | | | | | | | | 1 |

The "New Folder", "New", and "Edit" buttons are not unique to the Ms Device Manager, and are explained in the "Niagara AX User's Guide" in the "Driver Architecture" section. The "Match" button is not used for the Ms Driver.

The "Discover" button implements functionality that is unique and tailored to discovering Ms devices. By clicking the "Discover" button, the "learn" mode of the manager is invoked (the panes will be split, and a "discovery" table will be displayed in the top pane).

When you click Discover, the Ms Device will be searched for all points, and the results will be displayed in the top pane of the following split-pane format:



Note that the first (default) Element of each channel is listed, with a "+" mark in front of the Element number if there are additional Element in that point. To access the additional Element, click on the "+" sign to expand:

Single or multiple element can be added as control points with MsProxyExt extensions by selecting the discovered row(s) in the top pane, and clicking add. Doing so will cause the "Add" dialog box to appear: Once the point(s) are satisfactorily edited, click "OK" to create the proxy points corresponding to the point element.

Ms UDP Manager

The Ms UDP Manager is the default view when you double-click on a "Udp" folder (a MsUdpDeviceExt type folder) under a MsDevice in the Nav tree. This manager view provides a quick and easy way to display and learn Ms UDP in a Ms device.

The "Discover" button implements functionality that is unique and tailored to discovering Ms Devices. By clicking the "Discover" button, the "learn" mode of the manager is invoked (the panes will be split, and a "discovery" table will be displayed in the top pane). When you click Discover, the Ms Device will be searched for all the UDP program, and the results will be displayed in the top pane of the following split-pane format:

| # | | WorkPla | ce AX | | | _ 🗆 🔷 | × |
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| 🔄 🕸 💿 🎯 My Network 🔻 | Discovered | | | | | 122 obje | cts |
| 🕂 🏥 Services | Channel Value | From Controller | From Point | Last Update | | | ₽ |
| | 2 1.00 | 8 | 2 | 39mins 16.829s | ecs | | - |
| 中 (in NiagaraNetwork | 3 25.30 | 8 | 7 | 38mins 20.833s | ecs | | |
| | 4 0.00 | 0 | 0 | 2hours 18mins | 51.841secs | | - |
| | 5 0.00 | 0 | 0 | 2hours 18mins | 51.845secs | | - |
| | 6 0.00 | 0 | 0 | 2hours 18mins | 51.849secs | | |
| H Alarm Source Info | / 0.00 | 0 | 0 | 2hours 18mins | 51.856secs | | |
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| E @ Channel_2 | Channel_1 | Numeric Writable | 1.0 {ok} @ d | ef 1 | 41mins 25.056secs | defaultPolicy | - |
| 🕒 🕀 🖲 Channel_3 | Channel_2 | Numeric Writable | 1.0 {ok} @ d | ef 2 | 41mins 22.561secs | defaultPolicy | |
| ▼ ⁽³⁾ Palette | Channel_3 | Numeric Writable | 25.3 {ok} @ | def 3 | 40mins 27.066secs | defaultPolicy | = |
| | Channel_4 | Numeric Writable | 0.0 {ok} @ d | lef 4 | 2hours 20mins 58.556secs | defaultPolicy | |
| | Channel_5 | Numeric Writable | 0.0 {ok} @ d | ef 5 | 2hours 20mins 54.061secs | defaultPolicy | |
| ⊕·· 🐨 MsTCPNetwork | Channel_6 | Numeric Writable | 0.0 {ok} @ d | ef 6 | 2hours 20mins 54.562secs | defaultPolicy | - |
| 🖶 🛄 MsL09Device | Channel_7 | Numeric Writable | 0.0 {ok} @ d | ef 7 | 2hours 20mins 55.062secs | defaultPolicy | |
| 🖶 🔜 MsL 10Device | L(Channel 8 | Numeric Writable | 0.0 {ok} @ d | ef 8 | 2hours 20mins 55.556secs | IdefaultPolicy | |
| MsL 11Device | 📔 New Fold | ler 🏼 🎴 New | 📄 Edit | 🚔 Discov | ver 📀 Cancel 🤇 | Add 🛛 🖓 Mat | ch |
| | | | | | | | Ø |

The UDP is provides access to Microsmart UDP stored in the Microsmart controllers and gives the user programmer the ability to run and abort a UDP.

Ms Global Data Manager

The Ms Global Data Manager is the default view when you double-click on a "Point" folder (a MsGlobalDataExt type folder) under a Global Data in the Network Nav tree. This manager view provides a quick and easy way to display and learn Ms Global Data in a Ms Network.

The "Discover" button implements functionality that is unique and tailored to discovering Ms Devices. By clicking the "Discover" button, the "learn" mode of the manager is invoked (the panes will be split, and a "discovery" table will be displayed in the top pane). The Global Data can be used to read from and write to a Microsmart Global Data Channel.

Note : This will only receive and display global data that is sent by a Microsmart controller. It cannot receive and display global data that is actually sent out by another Global Data. This will be one of the primary ways for passing data from JACE to Microsmart points, such as automatic set point values and outside air temperatures.

Chapter

Microsmart TCP Tunneling

This feature allows a user to run the OPRIF program from a client PC to the MIG-112 gateway controller, any request data from the OPRIF, the MIG-112 controller will forward the message to specified Microsmart controller. The primary reason for this feature is to support programming of the Microsmart controllers.

In order to enable OPRIF tunneling, the OPRIF application required the windows 32 bit OS, and to communicate the Microsmart controller over the TCP connection it required to install VSP (virtual serial protocol) for serial communication where you wish to run the OPRIF tools.

To enable the VSP service, it required to install the "tdst-5-08-05-x86.exe" installer program.

Note : The Microsmart driver is only compatible with OFRIF version 11.4.

Installing VSP the Client-Side Software

To install the client-side software:

- Close all other applications on the PC.
- Run the "tdst-5-08-05-x86.exe" application.



- Double-click on tdst-5-08-05-x86.exe.
- This start some self-extraction and the Niagara Ax Serial Tunnel Setup program
- Once complete setup run the "Tibbo VSP Manager" and click the button Add.

| | Tibb | o VSP Manag | er - V5.8.5 | × |
|-----------------|-------------------|--------------|-------------|------------------------------|
| Port Help | | | | |
| Port name | Routing mode | Destination | Local | Add |
| | | | | Remove |
| | | | | Remove All |
| | | | | Properties |
| | | | | Allow Per-User Configs |
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| | | | | |
| | | | | |
| Add, edit, remo | ove Tibbo Virtual | Serial Ports | | |

| Tibbo Virtual S | erial Port (COM2) P | roperties | ?× |
|-------------------------|--------------------------|--------------------------|-------|
| VSP Properties | Control Lines Default Se | erial Settings | |
| →VSP name: | COM2 | For user: <u>VMUser</u> | |
| Networking- | | | |
| Transport protocol: | UDP 💌 | Transport provider: | • |
| | Client | Connection On data mode: | ~ |
| On-the-fly commands: | Out-of-Band 💌 | OTF index: 0 | * |
| Listening port: | 1001 | Connection 5 timeout: | * |
| _ Destination | | | |
| Specify by: | IP-address | Browse for DS | |
| | 192.168.10.11 | : 6120 🔺 | - |
| | | | |
| | | ОК С | ancel |

- Select a VSP name, before selected the COM make sure do not select a port physically exist in the PC. To verify the COM go the Windows system -> Device manager -> Ports (Com & LPT).
- Transport -> UDP.
- Transport provider -> Winsock.
- Routing mode -> Client.
- IP-address -> MIG-112 gateway IP address by default is 192.168.10.11.
- Port -> RS485-D1=6120 and RS485-D2=6121.

Connecting to Microsmart Tunnel.

With the VSP software installed and configured, start the OPRIF. A successful connection re-establishes the sign on screen with the virtual port shown configured.

| C:\Windows\system32\cmd.exe | | | | |
|--|---|--|--|--|
| T A C DIGITAL MANAGEMENT SYSTEM OPERATOR INTERFACE v 11.6 Thu Jul 22 17:23:14 2010 | | | | |
| SELECT DESIRED FUNCTION (C)onnect Directly to DMS Panel (M)icroSmart Direct Access (R)econfigure Communications Parameters (D)ial a Remote DMS Panel via Modem (A)uto Answer Enable/Disable (P)rinting Auto-Answered Alarms Enable/Disable (E)xit Program | COMM LINE: 6 BAUD RATE: 9600 PARITY: E STOP BITS: 1 WORD LEN: 7 ECHO MODE: N AUTO ANSWER 18 DISABLED. ALARM FRINTING DISABLED. | | | |
| CONNECTION ATTEMPT SUCCESSFUL PANEL NAME: test PANEL TIME: 07/22/10 THU 0523P ??? SCHDY=T ENTER PASSWORD * * | | | | |

Press button "C" and enter the level 3 password usually is 000.

You are now connected to the OPRIF via the FG-20 Virtual Serial Communication.

• To get the Microsmart online controller presses the button "M". The OPRIF will discover all the devices as the screen capture below, now you can do the programming directly to the controller.

| C:\Windows\system32\cmd.exe | |
|---|--------------|
| MicroSmart(tm) Controller Access System Upload Install database Clear database Upload database from controller SELECT CONTROLLER Thu Jul 22 17 | 7:26:03 2010 |
| MicroSmart Controllers Available 132 | |
| 101. IDL11 MSC-L11 | |
| | |
| | |
| | |

Chapter



Licensing

Microsmart driver License is running independently from the Tridium license, it has no restriction to run to any of the existing license vendor.

The Microsmart license provide 2 hour demo license without the unlock code. After the demo license expired the Microsmart Driver communication will stop automatically and will show fault in the Ms Network level. "ibmsMsTCP license expired". To extend the demo period user required to restart the station or reboot the JACE.

To request the license please submit the JACE/Soft-JACE or Web Supervisor host ID where is the ibmsMsTCP is install and to unlock the driver simply right click at the word "License" and the invoke action will appear "License Update".

Paste the unlock code at "Unlock code" properties. If the unlock code is successful enter the "mode" properties will automatically change to "registered" and user may require to reboot the JACE to take effect.

AX MICROSMART TCP DRIVER USER GUIDE

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| | 🗆 🔘 Mode 💿 demo | |
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| 🔄 🥩 💿 🎯 My Network 🔻 | Version ibmsMsTCP-3.8.108.1 | |
| | Host Id Win-CCAA-AFCF-1D31-79D0 | |
| ⊖ | Mode Oregistered | |
| ⊕ 🎲 Services | □ (◎) Generated 2015-61-28 | |
| E Drivers | Devint Limit 0 | |
| | Unlock Code E2767B1A5FB7C7FB2A1B58CF3BA942F5 | |
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