

HDA Data not Stored in Exaopc due to Security Builder Configuration Error

KB-0023-21

Document Summary	
Article Type	Technical Note
Products Affected	Exaquantum/PIMS
Versions Affected	All versions
Function Affected	Exaquantum History Catch-up (HDA)
Available Resolution	Provided in this document
Audience	Exaquantum/Centum Administrators
Summary	No HDA data is available on an otherwise correctly configured ExaOPC Server
Review Date	Document to be reviewed before July 2024

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Chapter 1 Introduction

This document details the procedure to restore reception and storage of data in the ExaOPC Historical Data (HDA) buffers on an otherwise correctly configured ExaOPC Server.

1.1 Audience

This guide is intended for system integrators and administrators.

Chapter 2 The Issue

History catchup on the Exaquantum server completes successfully but no data is received. The Historical Data store files on the ExaOPC Server are successfully created but not populated with data.

A look at the ExaOPC Server's HDA cache using ZOCSVRInfo shows no data for the registered DA items:

For information on using the ZOCSVRInfo tool please contact your Yokogawa representative or YMX support. Please refer to Chapter 5 for contact information.

The screenshot shows the ZOCSVRInfo application window. On the left is a tree view of the data structure, including 'Data Access', 'Alarms & Events', and 'Historical Data Access'. Under 'Historical Data Access', there are sub-categories like 'Cache' and 'Historical Data'. The 'Cache' sub-category is expanded, showing a list of DA items: 'Is', 'FCS105IF2R_RUN_PV.PV', 'FCS105IPPC_RUN_PV.PV', 'PPC_RUN_PV.PV', 'F2R_RUN_PV.PV', and '562MDT-N1-PV.PV' (highlighted). The main window displays a table with the following columns: Value, Quarity Co..., Time Stamp, Data Type, Use Flag, and Status. The table contains multiple rows, all with 'Empty' in the 'Value' column and various timestamps and flags in the other columns.

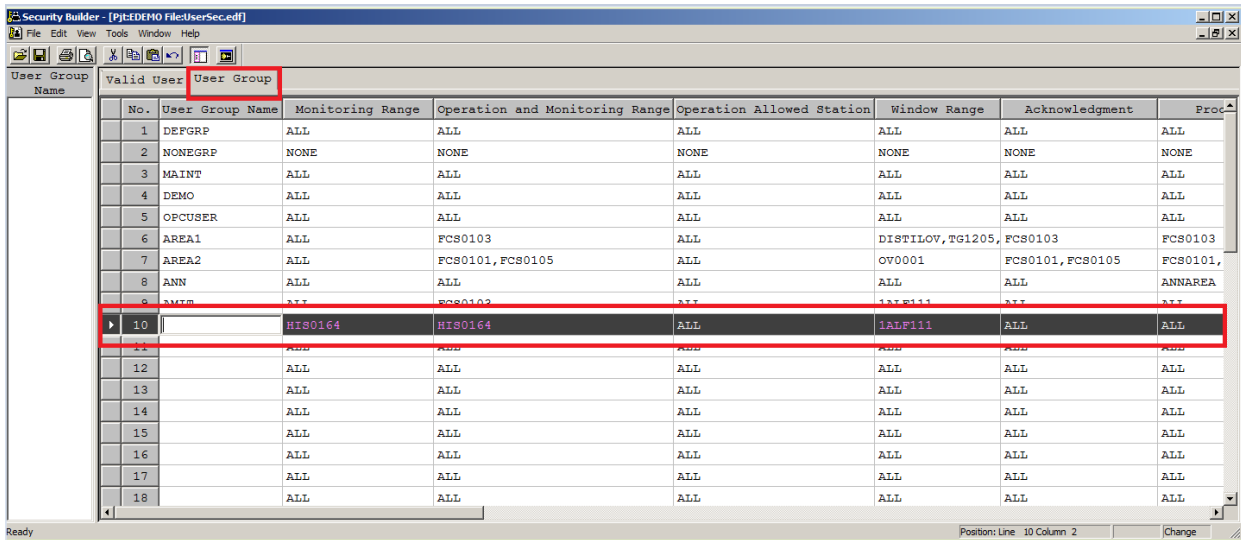
Value	Quarity Co...	Time Stamp	Data Type	Use Flag	Status
Empty	0x240000	2019/05/11 11:26:18	0	1	0x80
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00
Empty	0x00	1970/01/01 05:30:00	0	0	0x00

Chapter 3 The Cause

The issue is caused by incorrect settings in the DCS project.

A User Group is specified in the “Security Builder” without a “ User Group Name” as shown in the example below.

This results in a permission conflict that inhibits the normal data flow from the ExaOPC DA Server to the ExaOPC HDA Server.



The screenshot shows the 'Security Builder' application window with a table of user groups. The table has columns for 'No.', 'User Group Name', 'Monitoring Range', 'Operation and Monitoring Range', 'Operation Allowed Station', 'Window Range', 'Acknowledgment', and 'Proc'. Row 10 is highlighted with a red border, indicating a configuration error where the 'User Group Name' field is empty.

No.	User Group Name	Monitoring Range	Operation and Monitoring Range	Operation Allowed Station	Window Range	Acknowledgment	Proc
1	DEFGRP	ALL	ALL	ALL	ALL	ALL	ALL
2	NONEGRP	NONE	NONE	NONE	NONE	NONE	NONE
3	MAINT	ALL	ALL	ALL	ALL	ALL	ALL
4	DEMO	ALL	ALL	ALL	ALL	ALL	ALL
5	OPCUSER	ALL	ALL	ALL	ALL	ALL	ALL
6	AREA1	ALL	FCS0103	ALL	DISTILOV, TG1205,	FCS0103	FCS0103
7	AREA2	ALL	FCS0101, FCS0105	ALL	OV0001	FCS0101, FCS0105	FCS0101,
8	ANN	ALL	ALL	ALL	ALL	ALL	ANNAREA
9	MAINT	ALL	FCS0103	ALL	1ALF111	ALL	ALL
10		HIS0164	HIS0164	ALL	1ALF111	ALL	ALL
11		ALL	ALL	ALL	ALL	ALL	ALL
12		ALL	ALL	ALL	ALL	ALL	ALL
13		ALL	ALL	ALL	ALL	ALL	ALL
14		ALL	ALL	ALL	ALL	ALL	ALL
15		ALL	ALL	ALL	ALL	ALL	ALL
16		ALL	ALL	ALL	ALL	ALL	ALL
17		ALL	ALL	ALL	ALL	ALL	ALL
18		ALL	ALL	ALL	ALL	ALL	ALL

Chapter 4 Solution

To rectify the issue, the restrictions for the unnamed group will have to be removed by setting the values from “Monitoring Range” to “System Alarm Receiving” to ALL

No.	User Group Name	Monitoring Range	Operation and Monitoring	Station Allowed Station	Window Range	Acknowledgment	Process Message Receiving	System Alarm Receiving
1	DEFGRP	ALL	ALL	ALL	ALL	ALL	ALL	ALL
2	NONEGRP	NONE	NONE	NONE	NONE	NONE	NONE	NONE
3	MAINT	ALL	ALL	ALL	ALL	ALL	ALL	ALL
4	DEMO	ALL	ALL	ALL	ALL	ALL	ALL	ALL
5	OFCUSER	ALL	ALL	ALL	ALL	ALL	ALL	ALL
6	AREA1	ALL	FCS0103	ALL	DISTILOV,TG1205,	FCS0103	FCS0103	ALL
7	AREA2	ALL	FCS0101,FCS0105	ALL	OV0001	FCS0101,FCS0105	FCS0101,FCS0105	ALL
8	ANN	ALL	ALL	ALL	ALL	ALL	ANNAREA	ALL
9	AMIT	ALL	FCS0103	ALL	1ALF111	ALL	ALL	ALL
10		ALL	ALL	ALL	ALL	ALL	ALL	ALL
11		ALL	ALL	ALL	ALL	ALL	ALL	ALL
12		ALL	ALL	ALL	ALL	ALL	ALL	ALL
13		ALL	ALL	ALL	ALL	ALL	ALL	ALL
14		ALL	ALL	ALL	ALL	ALL	ALL	ALL
15		ALL	ALL	ALL	ALL	ALL	ALL	ALL
16		ALL	ALL	ALL	ALL	ALL	ALL	ALL
17		ALL	ALL	ALL	ALL	ALL	ALL	ALL

and “Exclude Operation” to “Exclude System Alarm” to NONE.

No.	User Group Name	Exclude Operation	Exclude Operation and Monitoring	Operation Denied Station	Exclude Acknowledgment	Exclude Process Message	Exclude System Alarm
1	DEFGRP	NONE	NONE	NONE	NONE	NONE	NONE
2	NONEGRP	NONE	NONE	NONE	NONE	NONE	NONE
3	MAINT	\$DR0002\$010101,\$DR0003	NONE	NONE	NONE	NONE	NONE
4	DEMO	NONE	NONE	NONE	NONE	NONE	NONE
5	OFCUSER	NONE	NONE	NONE	NONE	NONE	NONE
6	AREA1	NONE	NONE	NONE	NONE	NONE	NONE
7	AREA2	NONE	NONE	NONE	NONE	NONE	NONE
8	ANN	NONE	NONE	NONE	NONE	NONE	NONE
9	AMIT	\$DR*80102	\$DR*80102	NONE	NONE	NONE	NONE
10		NONE	NONE	NONE	NONE	NONE	NONE
11		NONE	NONE	NONE	NONE	NONE	NONE
12		NONE	NONE	NONE	NONE	NONE	NONE
13		NONE	NONE	NONE	NONE	NONE	NONE
14		NONE	NONE	NONE	NONE	NONE	NONE
15		NONE	NONE	NONE	NONE	NONE	NONE
16		NONE	NONE	NONE	NONE	NONE	NONE
17		NONE	NONE	NONE	NONE	NONE	NONE

Once the changes have been applied on the DCS project a restart of the ExaOPC server will also be required.

Chapter 5 Further Reading

More support is available at www.ymx.yokogawa.com/support or from support.ymx@yokogawa.com email address.

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Highlights

The Highlights section gives details of the changes made since the previous issue of this document.

- **Summary of Changes**

This is Issue 2.0 of the document related to Product Library version 10.0

- **Detail of Changes**

The changes are as follows:

Chapter/Section/Page	Change
Front page	Review Date updated
Page 6	Email address updated