

# **Migrating Advanced and Classic Historian Data**

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# Contents

<b>Why You Should Read This Manual</b> .....	v
<b>1. Introduction to the iHistorian Migration Utilities</b> .....	1
Before You Begin .....	2
Planning Your Migration .....	3
Adding Tags to the Archive .....	4
Planning Compression .....	4
Recommended Migration Order .....	5
Planning Migrations with Online Systems.....	5
Implementing Security During Migration.....	6
Planning Daylight Savings Time.....	6
Estimating Migration Time .....	7
Registering Your Advanced Historian Archives.....	7
After Migrating Your Data .....	8
Adding the iHistorian Toolbar .....	8
Overview Checklist .....	9
<b>2. Migrating Classic Historical Data</b> .....	11
Migrating Classic Historian Data .....	11
Configuring Classic Migration Options .....	12
iHistorian Server Options.....	14
THISNODE Options.....	15
Tag Add Options.....	16
Logfile Options.....	17

Readback Options .....	19
<b>3. Migrating Advanced Historian Data .....</b>	<b>21</b>
Exploring the Advanced Historian to iHistorian Migration Utility .....	21
Advanced Historian Connection Information .....	24
iHistorian Information.....	24
Migration Options .....	25
Migration Status.....	26
Migration History.....	26
Migrating Your Groups .....	26
Migrating Existing Advanced Historian Data .....	27
Migrating Remote Advanced Historian Data .....	29
Recommended Software Installation Order.....	31
Removing Advanced Historian (From Local Machine) .....	32

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# Why You Should Read This Manual

*Migrating Advanced and Classic Historian Data* is intended for users who are responsible for migrating their Classic or Advanced Historian systems to iHistorian. This manual assumes that you are familiar with the iFIX Advanced Historian or Classic Historian environments.

## Reference Documents

For related information about iHistorian, refer to the following documents:

- *Getting Started with iHistorian*
- *Using the iHistorian Administrator*
- *iHistorian Data Collectors*

For more information on running iFIX, refer to the iFIX *Electronic Books*.

If you plan on implementing Electronic Signatures and Electronic Records or iHistorian Security, Intellution recommends that you perform migration prior to setting up or initializing these features. If the migration will be a gradual process over time, please review the sections provided on *Electronic Signatures and Electronic Records* and *Implementing iHistorian Security*.



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# 1. Introduction to the iHistorian Migration Utilities

iHistorian provides two utilities that allow you to migrate your existing Classic and Advanced Historian configuration and data into the iHistorian environment. The iHistorian migration tools are designed to help you migrate your data quickly and easily. The tools allow you to:

- Select which Advanced Historian tags or Classic Historian archive files to migrate.
- Set up configuration options.
- Migrate data into your iHistorian system.

This manual describes the steps for planning your Historian migration and performing the migration of your data from both the Advanced Historian and Classic Historian environment, including:

- *Planning Your Migration*
- *Planning Migrations with Online Systems*
- *Migrating Classic Historian Data*
- *Configuring Classic Migration Options*
- *Exploring the Advanced Historian to iHistorian Migration Utility*
- *Migrating Existing Advanced Historian Data*
- *Migrating Remote Advanced Historian Data*

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## Before You Begin

Before you start migrating your Classic or Advanced Historian data, be aware of the following:

- Confirm that your iHistorian environment is set up. For more information, refer to the *Getting Started with iHistorian* manual.
- Confirm that you have ample disk space on the archive machine. Assume that you need to have at least as much free space as the amount of data that you intend to migrate. For example, if you have 300MB of Advanced Historian data, you need at least 300MB free disk space on the iHistorian Server to accept that data.
- Do not uninstall Advanced Historian until you have migrated all the data to your iHistorian. Advanced Historian must be running and have its components in place in order to migrate. The iHistorian Server that you are migrating to does not need to be on the same computer as the Advanced Historian or Classic data that you are migrating.
- Migrating a large amount of data from Advanced or Classic Historian into iHistorian may take a substantial amount of time, depending on the size of the database and the processing power of your machines. For more information refer to the *Estimating Migration Time* section.
- When migrating Historical data from a SCADA node to an iHistorian Server, Intellution recommends that you have an iFIX database loaded for the corresponding iFIX historical tags (on the source machine) prior to migration so that descriptions and EGUs can be retrieved.
- When migrating Historical data to iHistorian, Intellution recommends that you migrate the data in chronological order from the oldest to the newest. This prevents adding data out of order, which may impact migration performance and disk space usage.
- Migrate collection groups before historical data to maintain collection rates and deadbands.
- For iHistorian systems that are not yet online, Intellution recommends that you migrate existing historical data before putting the collectors online to improve performance.

*NOTE: For iHistorian systems that are already online, you may still migrate data while the collectors are running. Be aware, however, that this will have a negative effect on performance.*

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## Planning Your Migration

In order to successfully migrate your data from its existing iFIX or Advanced Historian platform into the iHistorian system, you should first plan out a sound migration strategy. Consider the following questions when planning your migration:

<b>Question</b>	<b>Refer to section</b>
How should I be adding tags to the archive?	<i>Adding Tags to the Archive</i>
Should I compress my data?	<i>Planning Compression</i>
In what order should I migrate my data?	<i>Recommended Migration Order</i>
Do I need any security rights to migrate my data?	<i>Implementing Security During Migration</i>
What if my data is being migrated into an already active iHistorian system?	<i>Planning Migrations with Online Systems</i>
Should I account for Daylight Savings Time or Time Zone differences?	<i>Planning Daylight Savings Time</i>
How long will my migration take?	<i>Estimating Migration Time</i>
What if my ADH archives have been moved around or I'm attempting to migrate backups of older ADH archives?	<i>Registering Your Advanced Historian Archives</i>
Is there anything I should do after migrating?	<i>After Migrating Your Data</i>

## Adding Tags to the Archive

You must have tags in iHistorian to hold the migrated data. You can add tags automatically during group migration, data migration, or manually prior to migration using the iHistorian Administrator. When you add tags by migration, you can set the maximum number of tag properties when the migration program has access to the real time database. Having access to the iFIX real time database allows the program to retrieve the Description, HI and LO Engineering Units, and Engineering Unit descriptions. These are not stored in the Classic Historian data or group files.

Migrating group files will add tags for immediate collection. Immediate collection occurs as a result of migrating the collection interval during the process of migrating the group files. Qualifier and phase values are not preserved; deadband values are preserved.

## Planning Compression

To enable archive compression during migration:

- [1] Add the tags through the iHistorian Administrator or,  
  
Migrate the historical groups.
- [2] After the tags are added to iHistorian, enable archive compression for each tag through the iHistorian Administrator before migrating the Classic Historian data.
- [3] The migrated data can then pass through archive compression during migration.

Collector compression is automatically configured for collection groups that have a configured deadband in HTA when those collection groups are migrated to iHistorian.

By default, tags are migrated with archive compression turned off. Only archive compression has any effect on migration.

## Recommended Migration Order

When migrating historical data to iHistorian, Intellution recommends that you migrate the data in chronological order from oldest to newest. This prevents adding data out of order, which may impact migration performance. Intellution also recommends that you migrate collection groups before data.

## Planning Migrations with Online Systems

If you are migrating your historian data into an already existing iHistorian tag database, you may discover that tags with the same name exist in both the iHistorian database and the iFIX or Advanced Historian database.

If you are migrating Classic Historian data and decide to select the Overwrite Existing Tags option in the Migration Options dialog box, the existing iHistorian tag properties will be replaced by the migrated Classic Historian tag properties and some configuration properties will be overwritten. If you decide to clear the Overwrite Existing Tags option, tag information will not migrate into the iHistorian tag database.

**NOTE:** Do not attempt to migrate the currently collecting Classic Historian file. If you do, you may receive an Error -9.

If you are migrating Advanced Historian data and decide to select the Allow Updates to Existing Data option in the Advanced Historian to iHistorian Migration Utility, the existing iHistorian tag data will be replaced by migrated Advanced Historian tag data if the data points have the same timestamps. If you decide to clear the Allow Updates to Existing Data option, the data will not be migrated (replaced) where there is existing data with duplicate timestamps in iHistorian.

## Limiting Processing Load on Server During Migration

Both Migration Utilities provide you with the ability to limit the amount of processing load on the server during migration. This allows your online iHistorian Server to continue processing data efficiently while migration occurs. By modifying the Events rate/second field in the Classic Historian Migration Options dialog box or the Max values/sec field in the Advanced Historian to iHistorian Migration Utility, you can specify how much data is sent and therefore how much processing power the Migration Utility receives on your system. The minimum you can set this rate to is 10,000 (or 0, meaning no throttle); the maximum you can set this field to is 100,000.

If you are performing a migration on a computer that is also processing other data or applications, you may want to set the event processing speed lower to allow your other applications to process well. The iHistorian Classic Migration and Advanced Historian Migration defaults to 10,000 events per second. This default allows you to throttle back the Migration Utility to allow for other applications processing, as well as continue running your Migration Utility at a reduced speed.

If you are not running other data or applications on your machine and you want to run the Migration Utility at maximum speed, set the Events rate/second or Max Values/sec fields to 0.

Intellution recommends that you do not set the events per second past 25,000 or below 10,000 (unless to 0). The higher the events per second, the faster your Migration Utility processes the migration. For example, the migration may take twice as long at 10,000 as it will at 20,000.

**NOTE:** *You cannot change this entry while migrating. It must be set prior to or changed after migration.*

## Implementing Security During Migration

In order to migrate data into the iHistorian System, you must be a member of the appropriate predefined iHistorian Security Groups if you have implemented iHistorian security. Refer to the *iHistorian Group Rights* section for information on the individual groups required for each task. If any existing iHistorian Security groups are defined, you must supply a username and password before migrating your data in either the Migration Options dialog box (for Classic Historian) or the Advanced Historian to iHistorian Migration Utility dialog box (for Advanced Historian).

## Planning Daylight Savings Time

When migrating Classic Historian data using the Migration Utility, you can select whether or not you want to apply Daylight Savings Time (DST) bias to timestamps. The Migration Utility converts the timestamps of migrated samples to UTC time (universal time format for storing timestamps) before writing the data to iHistorian. If you select this option, the Migration Utility will apply the DST offset before converting to UTC time. The timestamps are converted to UTC time by adjusting the time based on the local computer time zone offset and DST setting. If you enabled DST in your operating system during Classic Collection, you must select the Treat as DST Timestamp option.

**NOTE:** *Classic Historian and Advanced Historian assume that the computer you are migrating your data from and the computer that you are migrating your data to are in the same Time Zone.*

## Estimating Migration Time

Migrating a large historical database from either Advanced or Classic Historian into iHistorian may take a substantial amount of time, depending on the size of the database and the processing power of your machines.

To estimate migration time, refer to the total file size of the migration files. For Classic Historian migration, Intellution roughly estimates that it takes one minute to migrate 3 to 8.3 MBs of data. For the quickest migration, Intellution recommends that you clear the Migrate Current Alarm and the Readback Values option, if they are not required, in the Classic Historian Migration Options dialog box.

For Advanced Historian data, Intellution roughly estimates that it takes about 30 minutes to migrate 100 MB of data. This estimation assumes a default throttling of 10,000 events per second. If you have modified your Max Values/sec field in Advanced Historian, your migration time may differ. For more information, refer to *Limiting Processing Load on Server During Migration*.

**NOTE:** *In addition to migration file size, migration time depends upon the processing power of the computer running the Migration Utility. Intellution highly recommends that you select a computer with high processing power to run the migration program.*

## Registering Your Advanced Historian Archives

If you have changed the original location of your archives or you have backups of older archives that you wish to migrate, you must enable those archives by registering them. Use the following guidelines when registering your archives:

- No other archive can hold data in the same time frame.
- Archives must be registered using PIARTOOL -AR {Full Path of file}.
- PIARTOOL - AL must show that the archive is registered prior to migration.

Refer to your Advanced Historian documentation for more information about the PIARTOOL.

Any unregistered archives will not be migrated. For more information on registering your archives, refer to step 2 of *Migrating Remote Advanced Historian Data*.

## After Migrating Your Data

After migrating your data, ensure that you are no longer running HTC (Historical Collect). If you have HTC configured to start automatically from the iFIX WorkSpace, remove HTC from the SCU task startup list and replace it with the iFIX Collector.

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## Adding the iHistorian Toolbar

To configure the toolbar to appear in the WorkSpace:

- [1] Start iFIX v2.5 or greater. The Intellution Dynamics WorkSpace opens, if so configured.
- [2] Select Toolbars from the WorkSpace menu. The Toolbars dialog box appears.
- [3] Click the Customize button. The Customize Toolbars dialog box appears.
- [4] Click the Import button. The Import Toolbars dialog box appears.
- [5] Select the iHistorian.
- [6] Click the Import button. The iHistorian Toolbar, shown in *Figure 1-1*, appears.
- [7] Click the Close button to close the Import Toolbars dialog box.
- [8] Click the Close button to return to the WorkSpace.



*Figure 1-1: iHistorian Toolbar*

## Configure iHistorian Servers Button

The Configure iHistorian Servers button in the iHistorian Toolbar specifies the location of historical data retrieval for the WorkSpace, not the location of the historical data storage. You can view/retrieve data stored on these listed servers while you select a pen for a chart display. The Configure iHistorian Servers dialog box also determines where HDA programs and historical ODBC retrieve data from, which is always the default server.

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## Overview Checklist

The following is a list of general tasks for migrating your data to an online or new iHistorian system.

- [1] Verify that you are familiar with the setup recommendations. *How?*
- [2] Estimate the number of archives that iHistorian will create during migration and verify that you have enough disk space to accommodate the new archives and backups of those archives. *How?*

- [3] Migrate all collection groups. *How?*

If you are migrating to an online iHistorian system and tags exist in the iFIX database, the collector begins collecting on those tags.

- [4] Export tag configuration information.
- [5] Migrate Classic Historical data or, *How?*  
Migrate Advanced Historical data. *How?*

- [6] Backup the newly created archives.

- [7] Start your collectors.

[8] Verify data through one of the following options:

- iFIX chart
- Raw data dump into OLE DB
- Classic Historian log file
- Data Readback Verification option in the Classic (optional) and Advanced (automatic) Migration utilities

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## 2. Migrating Classic Historical Data

iHistorian supplies a utility that allows you to migrate your existing Classic Historian data (used in FIX32 and iFIX) into your iHistorian tag database. Before migrating your Classic Historian data, plan your migration thoroughly. Refer to *Planning Your Migration* for more information.

Once you have planned your Classic Historian migration, perform the following steps:

- [1] Add the iHistorian Toolbar to the iFIX WorkSpace. *How?*
- [2] Configure Classic Historian Migration Options. *How?*
- [3] Migrate existing groups. *How?*
- [4] Migrate your Classic Historian Data. *How?*

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### Migrating Classic Historian Data

The following procedure describes how to migrate Classic Historian data into your iHistorian database. For more information and tips on migrating data into a currently active iHistorian Archive (one that is currently collecting new data as well), please refer to the *Planning Migrations with Online Systems* section of this manual.

**NOTE:** When migrating data, Classic Historian nodes must be online with a loaded database so that descriptions and EGU values can be retrieved.

To migrate Classic Historian data into the iHistorian:

- [1] Click the iHistorian Migration Button, shown in *Figure 2-1*, to open the iHistorian Migration Utility.



*Figure 2-1: iHistorian Migration Button*

- [2] Select Configure Options from the Options menu.
- [3] Enter or modify any specific configuration information. For more information, refer to the *Configuring Classic Migration Options* section.
- [4] Select Migrate Collection Groups from the File menu. The Utility prompts you to specify if you would like to migrate all groups.

The iHistorian Classic Migration Utility connects to the specified server and migrates the groups.

**NOTE:** *When migrating groups, Qualifier and Phase parameters are not migrated. If a group is not active, it is still migrated to the iHistorian.*

*Groups are not preserved in iHistorian. All tags are added to iHistorian with the collection rate for the group.*

- [5] Select Migrate Historical Data from the File menu. The Select Historical Data File(s) dialog box appears.
- [6] Select one or more historical files and click Open.

The Migration Utility attempts to migrate all Historical Data. The title bar displays the current file status (1 of 5, for example). Refer to the Migration Utility main screen for information on the progress of the migration and any encountered errors.

**NOTE:** *The Migration Utility screen only displays the most recent lines of the log file. For the full set of logged messages, refer to the log file, typically located in C:\Dynamics\LocaNiFIX2IhMigration.Log.*

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## Configuring Classic Migration Options

Open the Migration Options dialog box, shown in *Figure 2-2*, by selecting Configure Options from the Options menu in the iHistorian Classic Migration Utility.

The Classic Historian Migration Tool automatically detects the default server and displays the default migration options. Some of the options that you can configure include:

- *iHistorian Server Options*
- *THISNODE Options*
- *Tag Add Options*
- *Logfile Options*
- *Tag Add Options*
- *Readback Options*

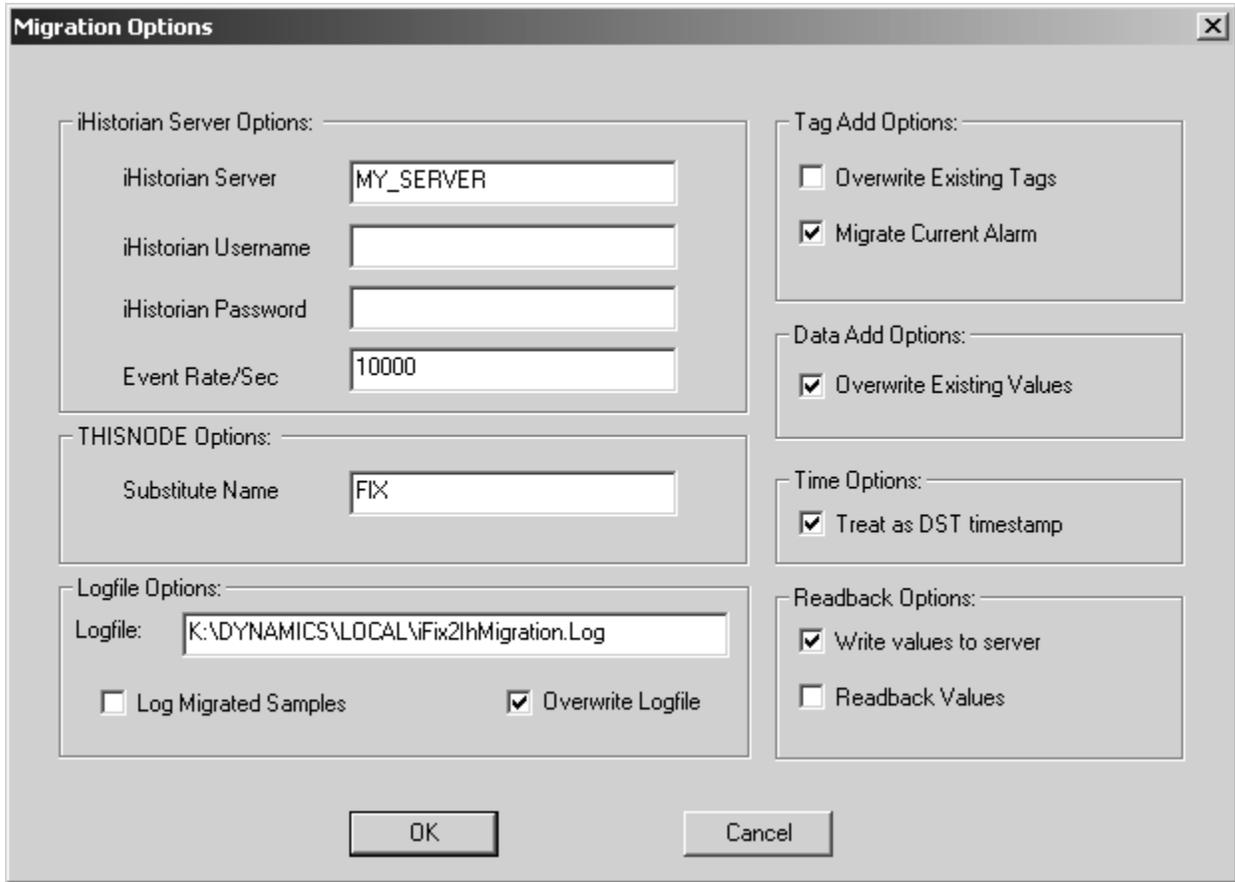


Figure 2-2: Classic Historian Migration Options Dialog Box

### iHistorian Server Options

Allows you to set up your server information, limit or expand the application processing time, and input any needed security information.

The iHistorian Server Options include:

<b>Field</b>	<b>Description</b>
iHistorian Server	The default server (set during installation). If you do not want to store data on the default server, enter the desired connected server in this field.
iHistorian Username and Password	If you have created and established Security Groups in your iHistorian Security Environment, you may need to enter the username and password here. By default, if you do not supply any information, the current logged in user will be checked. For more information about iHistorian Security, please refer to the <i>Implementing iHistorian Security</i> chapter of the <i>Getting Started with iHistorian</i> manual.
Event rate/sec	Allows you to limit the amount of server load caused by the Migration Utility. By reducing the Events/rate per second field in the Migration Options dialog box, you can allocate more time to real time collection. The default rate is 10,000. For more information, refer to <i>Limiting Processing Load on Server During Migration</i> .

## THISNODE Options

Specifies the Node name to use if you are migrating data with THISNODE. The utility automatically defaults to the name of the local iFIX node. If you want to change the Node name, enter a different Node name in this field.

## Tag Add Options

Allows you to set the following options:

The Field...	Specifies...
Overwrite Existing Tags	Selecting this option allows iHistorian to replace certain tag properties if the tags already exist in the iHistorian tag database.
Migrate Current Alarm	<p>Whether or not the Migration Utility separates the Current Alarm tags (B_CUALM) out and adds them to the iHistorian database. Classic Historian paired the B_CUALM tag inside another tag and counted it as one. If this is enabled, the iHistorian Classic Migration Utility will separate these tags and add them both to the tag database.</p> <p><b>For example:</b></p> <p>The Classic Historian Tag: FIX.TAG1.F_CV</p> <p>will convert to the iHistorian Tags: FIX.TAG1.F_CV FIX.TAG1.B_CUALM</p> <p><i><b>NOTE:</b> If you clear the Migrate Current Alarm box, the Current Alarm tags are not created and the alarm information is not transferred into iHistorian.</i></p>

The Field...	Specifies...
<b>Data Add Options</b> Overwrite Existing Values	Whether or not the Classic Migration Utility overwrites existing values that have the same timestamp as the values being migrated in an active iHistorian database during migration.
<b>Time Options</b> Treat as DST Timestamp	Whether the migrated data should have a Daylight Savings Time (DST) Timestamp. The timestamps are converted to UTC time by adjusting the time based on the local computer time zone offset and DST setting. For more information, refer to <i>Planning Daylight Savings Time</i> .

## Logfile Options

Allows you to configure the following options:

The Field...	Allows you to...
Logfile Location	Modify the default location of the iFIX2IhMigration.LOG file.

The Field...	Allows you to...
Log Migrated Samples	<p>Create a log file of all raw samples migrated. This will cause all the values, timestamps, and qualities to appear in the log file.</p> <p><i><b>NOTE:</b> Selecting this option significantly slows the performance of historical data migration.</i></p>
Overwrite Logfile	<p>Set whether or not the log file gets overwritten with each migration. By default, there is one log file (iFIX2IhMigration.LOG) that is overwritten each time you migrate data. Clearing this option causes the iHistorian Classic Migration Utility to append to the log file each time you migrate data.</p>

## Readback Options

Allows you to set the following options:

Use This Field...	To...
Readback Values	<p>Immediately read back samples after they are written. This verifies that the migration was successful. All samples that were written, including bad data quality and shutdown markers, are read back.</p> <p><i>NOTE: Selecting the Readback Values option puts additional load on the archiver and can slow the migration process.</i></p> <p>If samples are not found during the readback, the Migration Utility sends a message to the migration log file (\dynamics\local\ifix2ihmigration.log). It does not stop the migration.</p>
Write Values to Server	<p>That the data writes and tag adds are written to the Archiver.</p> <p>If you want to perform a readback-only migration, clear this option and select the Readback Values option. This allows you to select a specific Classic historical file and perform a readback to confirm that all samples in the Classic file exist in iHistorian. If samples are not found during the readback, the Migration Utility sends a message to the migration log file (\dynamics\local\ifix2ihmigration.log). It does not stop the migration.</p>



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## 3. Migrating Advanced Historian Data

The Advanced Historian to iHistorian Migration Utility allows you to migrate Advanced Historian data into iHistorian. Before beginning to migrate your Advanced Historian data, plan your migration thoroughly. Refer to *Planning Your Migration* for more information.

Once you have established your migration options, perform the following steps:

- [1] Add the iHistorian Toolbar to the iFIX v2.5 or later WorkSpace. *How?*
- [2] Explore the Advanced Migration Utility Options. *How?*
- [3] Use the Classic Historian Migration Utility to migrate historical tag groups. *How?*

***IMPORTANT:*** *If you plan to run the Advanced Historian to iHistorian Migration Utility on a non-SCADA node, migrate the groups after running the utility. If you try to migrate the groups first, you will not have correct EGU information for the iFIX/Advanced Historian historical tags.*

- [4] Migrate Advanced Historian Local Data or, *How?*  
Migrate Advanced Historian Remote Data. *How?*

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### Exploring the Advanced Historian to iHistorian Migration Utility

You can open the Advanced Historian to iHistorian Migration Utility, shown in *Figure 3-1*, by selecting Migration Tool for Advanced Historian from the iHistorian directory in the Start menu.

Some of the options you can configure include:

*Advanced Historian Connection Information* – Displays information for the Advanced Historian machine you are migrating your historical data from.

*iHistorian Information* – Displays the information for the iHistorian Server that you want to migrate your historical data to.

*Migration Options* – Allows you to select all or specific tagmasks and set the time range for migration.

*Migration Status* – Displays the current status of the migration.

*Migration History* – Displays the history of all migrations that have occurred on that machine.

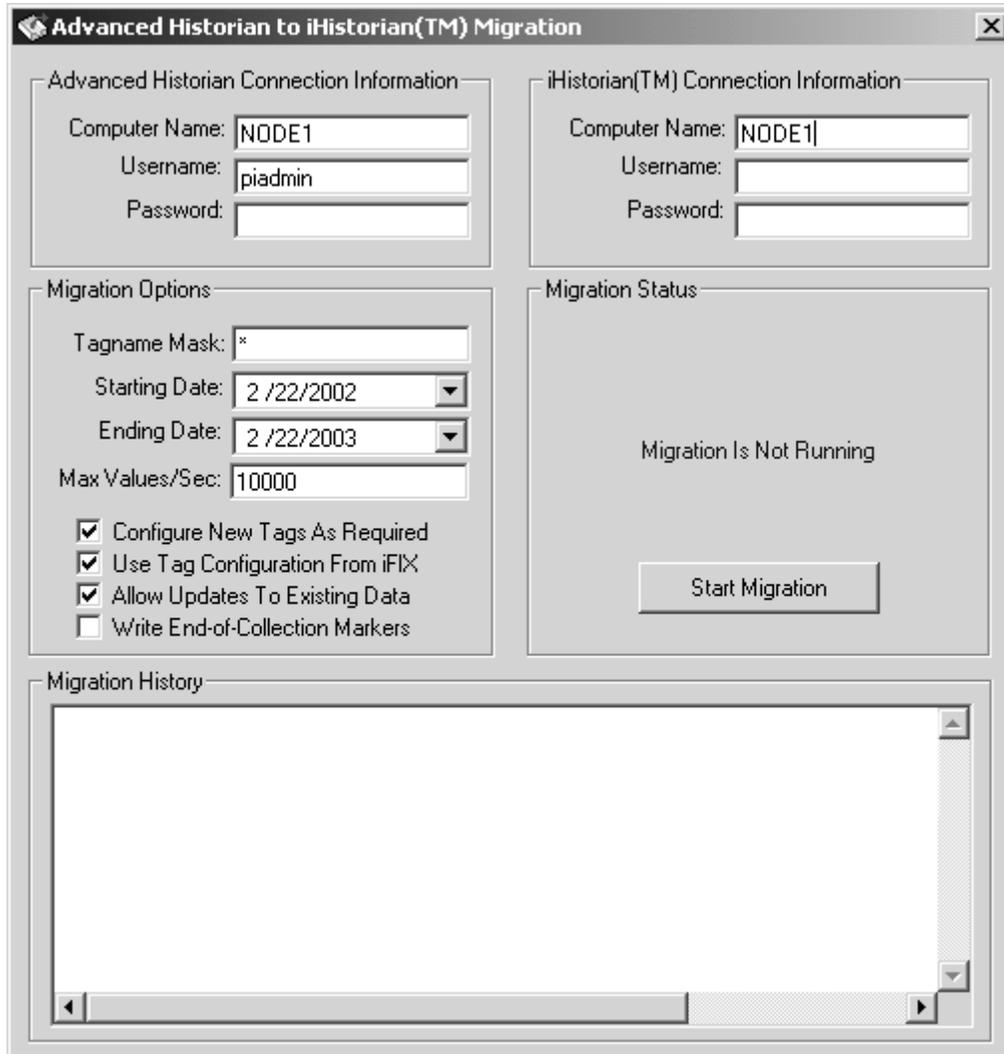


Figure 3-1: Advanced Historian to iHistorian Migration Utility

## Advanced Historian Connection Information

The Advanced Historian Connection Information section displays information for the Advanced Historian machine you are migrating your historical files from.

Field	Description
Computer Name	The name of the machine you want to migrate the Advanced Historian data from.
Username and Password	The username and password if you had Advanced Historian security configured for archives.

## iHistorian Information

The Historian Information section displays the information for the iHistorian Server that you want to migrate your historical data to.

Field	Description
Computer Name	The iHistorian Server to migrate ADH tags and data to.
Username and password	If you have created and established Security Groups in your iHistorian Security Environment, you may need to enter the username and password here. By default, if you do not supply any information, the current logged in user will be checked. For more information on setting up iHistorian Security, refer to the <i>Implementing iHistorian Security</i> .

## Migration Options

The Migration Options section allows you to select all or specific tagmasks and set the time range for migration.

The Field...	Allows you to...
Tagname Mask	Specify certain tags for migration only (*A_CV for instance) or select all tags (*).
Starting Date	Select a starting date for migrating data.
Ending Date	Set an ending date for migrating data.  <i><b>NOTE:</b> The Migration Utility migrates data up to but not including the specified Ending Date. Carefully select your Ending Date to ensure that you include all required data in the migration.</i>
Configure New Tags as Required	Specify whether the Migration Utility automatically creates tags upon migration, or migrates data only for tags that already exist in the iHistorian tag database. This allows you to manually create the tags you want to migrate in iHistorian first, then run the migration only for those tags.
Use Tag Configuration from iFIX	Maintains tag specific configuration for iFIX tags. If you do not select this option, iHistorian uses its tag configuration default settings when migrating iFIX tags.  For example, if you have an EGU set to 25-55 in an iFIX tag and you clear this option, the tag migrates with an EGU of 0-100.

The Field...	Allows you to...
Allow Updates to Existing Data	Selecting this option allows iHistorian to replace data if data already exists for the tag at that timestamp.
End of Collection Marker	Write a bad DQ data point for each tag when the migration concludes. Select this option if you do not want your trend applications to display a continuous plot of the last good sample for that iHistorian tag.

## Migration Status

Displays the current status of the migration progress. The Migration Status Window provides real time migration status including the currently migrating tag and the tag range (2 of 1000) status. This window also allows you to start the migration process and abort it once it has started.

## Migration History

Displays a log of what times and tag masks were migrated and the status (success/failure) of that migration. The information displayed in the Migration History window is also available in the log file, typically located in the C:\Program Files\iHistorian\LogFiles folder.

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## Migrating Your Groups

Migrate your groups using the Classic Historian Migration Tool. This allows you to maintain any configured collection rates and deadbands.

**IMPORTANT:** *If you plan to run the Advanced Historian to iHistorian Migration Utility on a non-SCADA node, migrate the groups after running the utility. If you try to migrate the groups first, you will not have correct EGU information for the iFIX/Advanced Historian historical tags.*

To migrate your Advanced Historian groups into the iHistorian:

- [1] Open the Classic Migration Utility from the iHistorian Toolbar.
- [2] Select Configure Options from the Options menu.
- [3] Select or clear the Overwrite Existing Tags option. This is the only option that applies to group migration. For more information, refer to the *Configuring Classic Migration Options* section.
- [4] Select Migrate Collection Groups from the File menu. The Utility prompts you to specify if you would like to migrate all groups.

The iHistorian Classic Migration Utility connects to the specified server and migrates the groups.

**NOTE:** *When migrating groups, Qualifier and Phase parameters are not migrated. If a group is not active, it is still migrated to the iHistorian with a collection rate.*

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## Migrating Existing Advanced Historian Data

When migrating Advanced Historian data, you can only run the migration from a node that either has the Advanced Historian Server or the Advanced Historian client installed. Also, ensure that Automatically Create Archives is enabled in the iHistorian Administrator.

To migrate your Advanced Historian data from an existing Advanced Historian node to your iHistorian Server:

- [1] From the Start menu, select the Migration Tool for Advanced Historian from the iHistorian directory. The Advanced Historian to iHistorian Migration dialog box appears, as shown in *Figure 3-1*.
- [2] Enter the name of the Computer from which you are migrating the Advanced Historian data.
- [3] If you configured Advanced Historian security, enter the username and password for security.

- [4] The Advanced Historian Migration Tool automatically detects and displays the default server in the iHistorian Connection Information Computer Name field. If you want to change the server you migrate data to, enter that server name in the Computer Name field of the iHistorian Connection Information section.
- [5] If necessary, enter a username and password in the iHistorian Connection Information Username and Password fields.

If you do not provide a username and password, security defaults to check the currently logged in user.

If you are already logged into NT or Windows 2000 with an account with rights to the iHistorian Server, you do not have to supply a new username and password.

**NOTE:** *You must have Write, Tag Administrator, and Read privileges in order to run the migration. Intellution recommends that Security Administrators run the migration, for best performance.*

- [6] If you do not wish to migrate all tags, enter a tagname mask for selected tags.
- [7] Select a start and end date from the drop-down calendars.

**NOTE:** *For more information on estimating migration time, please refer to the Estimating Migration Time section of this manual.*

- [8] If you want the Migration Tool to create tags automatically if they do not exist, leave the Configure New Tags as Required option selected. For more information on this setting, refer to the *Planning Migrations with Online Systems* section.
- [9] If you do not wish to overwrite existing values with migrated values containing the same timestamp, clear the Allow Updates to Existing Data option.
- [10] If you do not want your trend applications to display a continuous plot of the last good sample for that iHistorian tag, select the End of Collection marker. For more information on this setting, refer to *Migration Options*.
- [11] Click the Start Migration button.

- [12] Refer to the Migration History window and the log file for information on the success of the tag migration and any errors or problems encountered during migration.

You can re-run the migration utility for any time period.

---

## Migrating Remote Advanced Historian Data

This section describes how to migrate your Advanced Historian Data from a remote machine. Before migrating your Advanced Historian Data, ensure that you have installed the required software correctly. Refer to the *Recommended Software Installation Order* section for more information.

If this procedure is not run as listed, you may experience problems inserting a chart control into the iFIX WorkSpace, running any programs using fixtools.dll or fixhdadll.dll, or running certain iHistorian features. Several \*.dll(s) are replaced by older versions by the Advanced Historian. When AH is removed, it replaces the older versions with the originals and iHistorian works correctly.

To migrate remote Advanced Historian Data:

- [1] Ensure that PI services are running on the remote machine.
  - [a] Double-click the Services icon in the Control Panel. The Services dialog box appears.
  - [b] Locate the Services beginning with 'PI'. All should be started except for PI Shutdown.
- [2] Ensure that all needed archives are listed as registered.
  - [a] Open the MSDOS prompt.
  - [b] Navigate to the ...Dynamics\AdvancedHistorian\adm directory.
  - [c] Enter 'piartool -al' to list the registered archive files.
  - [d] Register any unregistered archive files that you need to migrate by typing 'piartool -ar ' + {fully qualified archive name.}

Example :

```
piartool -ar c:\Dynamics\archives\DynamicArchive.001
```

- [3] On the local machine (machine with iHistorian loaded), run the Migration Utility.
  - [a] From the Start menu, select the Migration Tool for iHistorian in the iHistorian directory. The Advanced Historian to iHistorian Migration dialog box appears, as shown in *Figure 3-1*.
  - [b] Enter the name of the remote computer you are migrating the Advanced Historian data from.
  - [c] If you configured Advanced Historian security, enter the username and password for security.
  - [d] The Advanced Historian Migration Tool automatically detects and displays the default server in the iHistorian Connection Information Computer Name field. If you want to change the server to which you will migrate data, enter that server name in the Computer Name field of the iHistorian Connection Information section.
  - [e] If you have set up security on your iHistorian Server, enter a username and password in the iHistorian Connection Information Username and Password fields.

If you do not provide a username and password, security defaults to check the currently logged in user.

If you are already logged into NT or Windows 2000 with an account with rights to the iHistorian Server, you do not have to supply a new username and password. You must have Write, Tag Administrator, and Read privileges in order to run the migration. Intellution recommends that Security Administrators run the migration, for best performance.
  - [f] If you do not wish to migrate all tags, enter a tagname mask for selected tags.
  - [g] Select a start and end date from the drop-down calendars. Intellution recommends migrating data in two month time blocks, from the oldest data to the newest. For more information on estimating migration time, please refer to the *Estimating Migration Time* section of this manual.

- [h] If you want the Migration Tool to create tags automatically if they do not exist, leave the Configure New Tags as Required option selected. For more information on this setting, refer to the *Planning Migrations with Online Systems* section.
- [i] If you do not wish to overwrite any information in existing tags, clear the Allow Updates to Existing Data option.
- [j] If you do not want your trend applications to display a continuous plot of the last good sample for that iHistorian tag, select the End of Collection marker. For more information on this setting, refer to *Migration Options*.
- [k] Click the Start Migration button.
- [l] Refer to the Migration History window and the log file for information on the success of the tag migration and any errors or problems encountered during migration.

## Recommended Software Installation Order

Before migrating your remote Advanced Historian Data, ensure that you have installed the required software correctly on your local machine. Intellution recommends the following installation order.

- [1] Install iFIX 2.6 or higher.
- [2] Reboot your computer.
- [3] Install Advanced Historian.
  - [a] Select Custom Installation with ONLY Client install.
  - [b] Reboot your computer.
- [4] Install iHistorian completely.

## Removing Advanced Historian (From Local Machine)

After you have completely migrated your remote Advanced Historian Data, Intellution recommends that you remove Advanced Historian from your local machine.

To remove Advanced Historian from your local machine:

- [1] Stop all PI services from the Control Panel Services Dialog box.
  - [a] Double-click the Services Icon in the Control Panel. The Services dialog box opens.
  - [b] Locate the PI Network Manager Service and click the Stop button.
- [2] Another dialog box appears asking if you would like all the other services stopped. Click Yes.
- [3] Locate the bufserv service and stop it.
- [4] Completely remove Advanced Historian using the uninstall feature in the Add/Remove Programs dialog box.
- [5] Reboot your computer.
- [6] Delete the \AdvancedHistorian directory from the Dynamics base path.

***NOTE:** You may want to stop PI Services again, as detailed in step 1.*
- [7] Use the AHClean utility located on the *Intellution web site* in the Developers Corner.
- [8] Run AHClean.exe and click the Clean Registry button.
- [9] Reboot your computer.

# Index

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## A

- adding tags to an archive 4
- Advanced Historian
  - connection information 24
- Advanced Historian migration utility 1
  - described 21
  - exploring 21
  - iHistorian information 24
  - migrating data 1, 27
  - migrating groups 26
  - migrating local data 21
  - migrating remote data 21
  - migration history 26
  - migration options 25
  - migration procedure 21
  - migration status 26
  - options 21
  - recommended software installation order 31
  - removing from local machine 32
- archive
  - adding tags to 4
  - registering 7
- archives
  - adding tags to 4

---

## C

- Classic Historian migration utility 1
  - adding toolbar to workspace 8
  - configuration options 12
  - configuring options 1
  - iHistorian Server options 14
  - logfile configuration options 13
  - migrating data 11
  - migration procedure 11
  - tag add configuration options 13

- THISNODE configuration options 13, 15
- compression
  - planning 4

---

## E

- exploring 1

---

## L

- logfile options
  - Classic Historian utility 17

---

## M

- migrating data 1
  - estimating time 2
  - from SCADA node 2
  - maintaining chronological order 2
- migration
  - recommended order of data 5
- migration time
  - estimating 7
- migration utilities
  - Advanced Historian archive files 1
  - before you begin 2
  - Classic Historian archive files 1
  - defined 1
  - functions performed 1
  - planning 1

---

## O

- online systems
  - planning migration 5

---

## P

- planning your migration
  - adding tags 3
  - estimating migration time 3
  - handling time zones 3
  - order of data 3
  - planning compression 3
  - post migration cleanup 3
  - registering archives 3
  - security 3
  - working with online systems 3
- processing time
  - limiting load on server 5

---

## S

- security
  - implementing during migration 6

---

## T

- tag add options
  - Classic Historian utility 16
- time zones
  - planning migration 6