

## HT3 Version 3.1.0

Data Flow Systems, Inc. is pleased to announce the availability of version 3.1.0 of HT3.

These release notes provide information on the following:

- [New features and enhancements](#)
- [Bug fixes](#)

A summary of features and detailed functional procedures can be found in the HT3 User Guide.

### New Features and Enhancements

- **Module Patching Utility (Module Reset):** The command line inject tool used by the patch program and the block inject tool has been modified to allow a module reset.
- **Custom Screens on HT3 Mobile:** To prevent the screen from flickering when updating the screen data, jquery requests are being used instead of refreshing the entire page.
- **Context Sensitive Help in Configuration Editor:** The small popup screens have been replaced with links to the appropriate page in the online HT3 User Guide.
- **PMT Radio Map Import (DFS Personnel Only) -** Tool for importing the radio map from a PMT project into HT3 has been added. Refer to the "Radio Import Procedure" readme for more information.

### Bug fixes

- **Configuration Editor (Modbus Driver Flow Control Field) -** The Flow Control field in the Modbus driver panel now saves correctly when the driver configuration is saved.
- **Configuration Editor (Station Panel Offline and Retry Count Fields) -** The Offline and Retry Count fields no longer change to 0 (zero) when focus is removed from the input box.
- **Trender -** The trend colors no longer change when a reference line is added.
- **Conversion Script (DFS Personnel Only) -** The ht2-ht3.sql script, which is run on a system that has been updated from HyperTAC II to HT3, has been updated to include registry entries added since the initial HT3 release.
- **Custom HTML Pages:** Links to custom HTML pages from within a custom screen now operate properly. A screen object with a link to a custom HTML page will now open the HTML page when clicked.
- **Detail Reports:** Detail reports that switch to text output when the report contains a large amount of data now display properly.

- Hdriver Intermittently Crashing in Systems Using DFP Protocol: The Rx buffer was increased to accommodate TCU responses that occasionally exceeded the maximum message length.
- Call Out and Call In - In order to support the new V.92 socket modem, new scripts that auto detect the modem and convert audio files have been added.
- Call Out - Call out no longer crashes when a contact that is referenced in a call out schedule is removed from the Contact list.
- Ladder Management Tool - The script that outputs the list of logic files is now case insensitive so that logic files with an uppercase .VLB file extension will be included in the list.
- Virutal Points in HT3 Mobile - Virtual points are now listed on HT3 Mobile screens.

## HT3 Version 3.0.7

Data Flow Systems, Inc. is pleased to announce the availability of version 3.0.7 of HT3.

These release notes provide information on the following:

- [New features and enhancements](#)
- [Bug fixes](#)

A summary of features and detailed functional procedures can be found in the HT3 User Guide.

### New Features and Enhancements

- **Pump Activity Report:** New station analysis graphs for the pump activity report have been added. Mouse over the name of a pump to display a report; click the name of the pump to open the report in a new window. Click the name of the station to open the station reports - Total Run Time; Total Starts; Minimum, Average, and Maximum Run Times; Status of "Any Pump" Point.
- **Force Main Report:** This new report measures force main usage. Of the total number of pumps feeding into a common force main, the chart shows the number of pumps that are running at any one time. On a system running Symphony Pump and Flow Management, the report can be used to analyze how Symphony is performing and determine if any fine tuning is necessary. Symphony is an optional upgrade to HT3. This pump and flow management software uses SCADA to coordinate the activities of wastewater pump stations operating on a common force main. Symphony replaces pump stations' random controls with a synchronization scheme that prevents pump stations from working against each other. For more information on Symphony, visit the DFS website at [www.dataflowsys.com](http://www.dataflowsys.com)
- **Trender:**
  - Changes to font size made in trends are now saved as part of the trends parameters. This ensures that the desired font size will display the next time the trend is opened.
  - An additional way to change start and end dates for trends has been added. Click the time span display (top left corner) or the end date display (top right corner) to open the Range Picker. The Range Picker allows you to adjust the hour, minutes, AM/PM, month, day, and year using either the up and down scroll buttons or by typing in the desired values.
- **Drivers:** A new driver for use over networks, including cellular networks, has been developed for HT3. Contact DFS' Sales Department at [sales@dataflowsys.com](mailto:sales@dataflowsys.com) or 321-259-5009 for information on using this driver on your system.

### Bug fixes

- **Trender:** Trends opened from defaults screens now allow adjustments to the trend's settings; RIM analog point addresses are now listed in the address selection tool; the vertical reference line that appears when a trend line is clicked or moused over now disappears when the mouse leaves the trend area.
- **Restore Screen:** Fixed a problem in the restore\_screen (used when restoring MySQL data to the SCADA software) that prevented it from working in HT3.
- **Reports:** The new interface now correctly handles spaces in keywords.
- **HTML Custom Page Upload:** Fixed the upload error that occurred when trying to upload a custom html page.
- **TACEM -** Fixed the error that occurred when configuring Q points on an emulated station.
- **HT3 Mobile:** Fixed reporting link when running through port forwarding.
- **Infoserver:** No longer crashes when large floating point entries are written into a journal.
- **Backup Script (rdist):** New reports database is now included in the backup.

## HT3 Version 3.0.6

Data Flow Systems, Inc. is pleased to announce the availability of version 3.0.6 of HT3.

These release notes provide information on the following:

- [New features and enhancements](#)
- [Bug fixes](#)

A summary of features and detailed functional procedures can be found in the HT3 User Guide.

### New Features and Enhancements

- Several enhancements have been made to HT3 Mobile:
  - HT3 Mobile has been updated to use HT3 logins and passwords as well as partitioning. When you open HT3 Mobile, you will now be required to use the same login and password you use to gain access to the workstation version of HT3.
  - A configurable session time has been added. If HT3 Mobile runs without any activity for the period configured for session timeout, you will have to log in again. The default session timeout is set at 300 seconds (5 minutes). Click "Options" on the HT3 Mobile home page.
  - Standard reports can now be run from HT3 Mobile. Click "Reports" on the HT3 Mobile home page to generate a Analog, Derived Flow, Detail, Min Max Average, Pulse, Pump Activity, or Snapshot report. For more information on these reports, see [Creating and Viewing Reports](#) in the HT3 User Guide.
  - A System Statistics dashboard, similar to the [one included in the workstation version of HT3](#), is now available in HT3 Mobile. This screen displays information on the current status of important system-level points, including Hyper SCADA Server (HSS) AC power and battery voltage, active Hyper Server Module (HSM) CPU usage, and length of time active HSM has been running since its last reboot.
- Four custom screen templates for 3D TCU stations have been added to Screen Builder:
  - 3DDUPLEXDUCER - duplex using transducer
  - 3DTRIPLEXDUCER - triplex using transducer
  - 3DDUPLEXFLOATS - duplex using floats
  - 3DTRIPLEXFLOATS - triplex using floats
- DFP mode in hdriver has been updated to allow for configuration of RIM analog points for temperature and VDC (battery voltage).

## Bug fixes

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- HT3 System Tray: Fixed problem with the system tray not showing disconnected status when the network connection is lost.
- Networking: A configurable netmask option that works with redundant systems has been added. This configuration must be done by DFS Service Personnel. This configuration is only necessary when the netmask for the primary and secondary servers is not a default class C.

## HT3 Version 3.0.5

Data Flow Systems, Inc. is pleased to announce the availability of version 3.0.5 of HT3.

These release notes provide information on the new features and enhancements included in this version.

A summary of features and detailed functional procedures can be found in the HT3 User Guide.

### New Features and Enhancements

- Ladder Manager, a tool for for analyzing and organizing your ladders, has been added to HT3. The Ladder Manager is available from the "Tools" menu of HT3. See [Using System Troubleshooting and Maintenance Tools: Ladder Manager](#).
- The Comment Log has been updated to include an option to enter a comment for a date in the past and to view a print-friendly version. See [Creating and Viewing Reports: Comment Log](#).
- Instructions for automating reports using the Windows Task Scheduler have been added to the HT3 Help. Task Scheduler is a utility in the Windows operating system that lets you create scheduled automated tasks. This utility can be used to run any HT3 report on a schedule you create. See [Automate a Report Using Task Scheduler](#).
- Two new reports have been added. The [Min Max Average report](#) lists the daily minimum, maximum and average values of each point included in the report. It is designed for analyzing analog data such as pressure and flow measurements, chlorine residuals, turbidity, and tank levels. The [Snapshot report](#) returns values in 15 minute intervals for each point included in the report. The value returned is the last value recorded for the point prior to the interval. The Snapshot report is designed for analyzing analog data such as water plant turbidity measurements and chlorine and PH levels.

## HT3 Version 3.0.4

Data Flow Systems, Inc. is pleased to announce the availability of version 3.0.4 of HT3.

A list of bug fixes for version 3.0.4 of HT3 is provided below.

A summary of features and detailed functional procedures can be found in the HT3 User Guide.

### Bug fixes

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- **Reports:** Added an option for legacy reports for data that is stored in raw format. This fix only applies to systems that were upgraded from HyperTAC II to HT3. Upgraded systems will have journal data stored in both the legacy raw format and the new floating point format. When a HyperTAC II system is upgraded to HT3, the date the upgrade occurred will be entered in the registry. Reports run on journals created prior to the upgrade date, must be run using the "Run Legacy Report" button.
- **Infoserver:** Pulse points are now being logged using floating point values instead of raw values.
- **Trender:** Combined trends now display properly.
- **Remote File Distribution (rdist):** The rdist script, which is used to backup/copy data on a redundant Hyper SCADA Server, was updated to eliminate database messages and add them to the rsync section.
- **Digipeat Map:** The map is now sorted by station number.

## HT3 Version 3.0.3

Data Flow Systems, Inc. is pleased to announce the availability of version 3.0.3 of HT3.

These release notes provide information on the following:

- [New features and enhancements](#)
- [Bug fixes](#)

A summary of features and detailed functional procedures can be found in the HT3 User Guide.

### New Features and Enhancements

- A new trending tool is included in this release. [Trender](#) replaces the old Trend Viewer and Trend Builder. The interface has been completely redone to make it more user-friendly - but no functionality has been lost. Improvements include support for floating point journals, zoom in and out using the scroll wheel on a mouse, detaching the Trender (opening in a new window) so trends can be viewed in full-screen mode, and auto range (sets the upper and lower range of the trend to the minimum and maximum values recorded for the point during the current time span).
- Journals now store floating point values instead of raw values. With the new floating point journals, the data is converted prior to being logged in the journal and is stored as "engineering" values. These floating point values are being used in HT3 reports and trends to enhance performance. For large reports, there will be a noticeable increase in performance due to fewer calculations. Additionally, third party developers no longer have to do raw-to-float conversions on every raw value entry for every analog point; they can simply query the floating point journal directly.
- Trends in HT3 Mobile have been updated to support the new floating point database format.
- Hdriver was updated to properly sync TIM configurations on any Configuration Editor change to a TIM station.
- Documentation now includes a search feature and is available in a PDF "book-style" version for ease of printing.

### Bug fixes

- HT3 Mobile: Screen images are no longer caching; they are redrawn when status changes.
- Registry Editor: The time zone can now be configured when setting the system's date and time.

- Syncing Redundant HSMs: Installed the rdate package and updated the boot script to allow the secondary HSM to sync off the primary.
- Traffic Monitor: Updated to decode DFP messages from digipeated sites.
- HT3 Mobile/Android: Caching in Android devices now works properly; also fixed formatting and linking issues.
- Digipeat Map: No longer shows NIM or Modbus stations.
- Context Sensitive Help: Links are now working.
- Restore Script: No longer generates shell error.

## HT3 Version 3.0.2

Data Flow Systems, Inc. is pleased to announce the availability of version 3.0.2 of HT3.

These release notes provide information on the following:

- [Bug fixes](#)

A summary of features and detailed functional procedures can be found in the HT3 User Guide.

### **Bug fixes**

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- Hdriver/Configuration Editor: A core dump no longer occurs when changing a RIM's type in Configuration Editor.
- HT3 Mobile: All images are now being loaded.

## HT3 Version 3.0.1

Data Flow Systems, Inc. is pleased to announce the availability of version 3.0.1 of HT3.

These release notes provide information on the following:

- [New features and enhancements](#)
- [Bug fixes](#)

A summary of features and detailed functional procedures can be found in the HT3 User Guide.

### New Features and Enhancements

- Hdriver has been updated to support points R9 and R10 for remote reset and RTC hung special events in the new TIM protocol.
- Added support for allowing the DFS user to mount a flash drive.

### Bug fixes

- HT3 Mobile: An error is no longer generated when configuring HT3 Mobile with a space in the system name; mobile access is now aliased to port 8880.
- Infoserver: No longer hangs when a client machine locks up.
- System Stats: Fixed the CPU used percentage being reported from the system statistics script and custom screen.
- System Tray Applet: No longer opens a new window when a redundancy take over occurs.
- System Restore: No longer allows a restore of configurations if HT3 is running, but it will allow all other data to be restored; now allows a system restore from a HyperTAC II system to an HT3 system.

## HT3 Version 3.0

This document discusses HT3 version 3.0. It includes the following:

- [A brief description of the software](#)
- [A list of the significant changes made in this release](#)
- [System Requirements](#)
- [Instructions for configuring a Windows workstation](#)

A summary of features and detailed functional procedures can be found in the HT3 User Guide.

### Description

HT3 is a network-based SCADA software package installed on the Hyper SCADA Server (HSS). HT3 monitors and controls in-plant and remote stations from the HSS, which communicates with stations through a network link or a combination of network and radio.

Users access HT3 from Windows-based workstations using a Java-enabled Internet browser. The only software installed on a workstation is a Web browser, Java 1.5 and a Java policy file (the policy file gives HT3's Java applets permission to write to specific directories on your computer).

### Significant Changes in this Release

Customers familiar with prior releases will notice that HT3 has a new look and feel. Although the interface and some of the background processes have changed, the software includes many of the same telemetry tools, quick transfer of information and robustness.



**HT3 Mobile** is a streamlined version of HT3 optimized for today's smart phones. In HT3 Mobile, users will find all the essential tools needed for working in the field. The features provided in HT3 Mobile are: alarms, screens, trends and station status. Contact DFS for information on purchasing this option.



**Symphony™** utilizes SCADA to coordinate the system-wide operation of sewer lift

stations for the purpose of reducing force main pressures and equalizing flow into a wastewater treatment plant. The result is a significant reduction in energy costs and a solution to daily peak-flow problems. Contact DFS for information on purchasing this option.

### **Additional significant changes include:**

- HT3's interface has been reconfigured to provide more screen space; the [system tray](#) has been moved to the top right corner.
- **Public screens** - view-only custom screens that can be placed on your utility website - are now supported. Contact DFS for information on configuring this option.
- "[System Stats Viewer](#)" added. This viewer displays information on the current status of important system-level points, including driver loop time, Hyper SCADA Server (HSS) AC power and battery voltage, active Hyper Server Module (HSM) CPU usage, and length of time active HSM has been running since its last reboot.
- Three new reports added: [Station Config](#), [Modbus Map](#) and [Digipeat Map](#).
- [Registry Editor](#) added. This is a high-level tool intended for DFS Service Personnel, but can also be used to [set the server's time and date](#).
- Public Screens added. You now have the ability to create screens for general public viewing and link to them from your utility's website. Public screens don't allow controls; they are for informational purposes only. Contact DFS for more information on this feature.
- [Camera Viewer](#) now supports any network-based camera.
- An [image picker](#) has been added to Screen Builder. With this tool, you can see thumbnails of all the images in your library and also enables you to organize and categorize your images.
- A [resizable static image](#) object has been added to Screen Builder. This object can be a .gif, .jpg, or .png image. It supports transparency, can be rotated and flipped, can be resized, and can have its hue, saturation and brightness adjusted.

### **Bug fixes:**

- Download Tool: Files are now sorted alphabetically rather than randomly.
- Screen Builder: Increased the contrast of the LED Bar object in Screen Builder.
- Configure Voice Tool: The Configure tab of the Configure Voice tool now saves changes. The Configure Voice tool now loads the standard recordings list when it is opened.
- Module Patching Utility: NIMs now respond to a directory check.
- Java Client Audio: Audio now works and no longer produces an error.
- Custom Screen Viewer: Partition screens are now loaded.
- Configuration Editor: Deleting a station no longer generates an error or causes the system tray to disconnect and fail new connections.
- Telemetry Traffic Tool: No longer loses connection after running for a time.

- **rt\_alarm Table:** No longer changes the alarm\_text field to ONLINE and the value field to 0 when a module offline clears.
- **Trender:** Adding a point to a trend opened from the Station Status Viewer and then making changes to the original point no longer ignores the changes or assigns the original point's information to the newly added point.
- **Info Server:** Determined and fixed cause of infoservert lockup with Java client.
- **User Login:** Java no longer loses login information, which resulted in failed permissions for control and alarm acknowledgement, when navigating between HT3 utilities.
- **File Upload Utility:** Now works after updating code to use new \_FILES method of PHP 5.
- **Hdriver:** NIM Central now replies from the proper port.
- **OS and MySQL Passwords:** DFS and root passwords for the OS and MySQL were changed.

## System Requirements

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### Minimum Requirements for a Workstation Computer

- Windows XP with SP2
- Internet Explorer 8.0
- Java 1.5

## Setting Up a Windows Workstation

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Take the following steps to configure a Windows workstation to access HT3:

- [Edit Hosts File](#)
- [Change Browser Settings](#)
- [Install Plug-Ins and Java Policy File](#)
- [Start HT3](#)

### Edit Hosts File

The hosts file allows you to associate a name (for example, *ht3*) with an IP address. Editing the hosts file as described below is necessary to allow HT3's applications, such as Screen Builder and Logic Builder, to save files on the workstation (a [Java Policy file](#) is also required). Adding an entry for HT3 to the hosts file also allows you to use the host name instead of an IP address to connect to your Hyper SCADA Server through HT3.

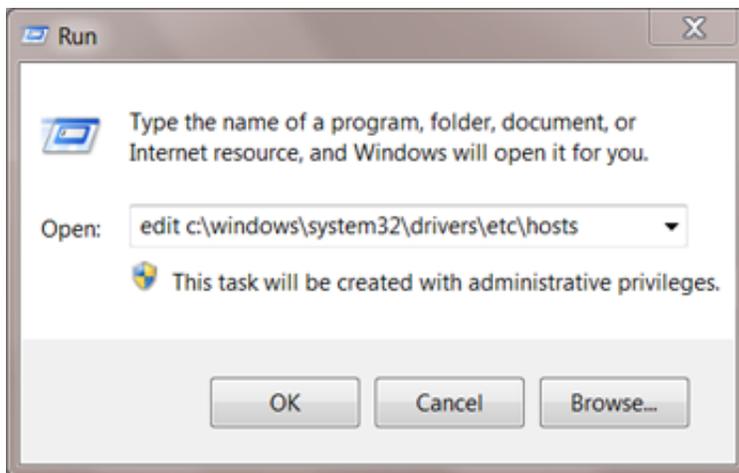
**Note to Users Upgrading from HyperTAC II:** You do not need to edit the hosts files of existing workstations. HT3's Java Policy file also recognizes the host name `hypertacii` used by existing HyperTAC II systems.

1. On the Windows taskbar, click the **Start** button, and then click **Run**.
2. In the **Run** box, type one of the following (depending on your OS level) and click **OK**:

For **Windows XP and newer**, type  
`edit c:\windows\system32\drivers\etc\hosts`

For **Windows 2000 / NT**, type  
`edit c:\winnt\system32\drivers\etc\hosts`

For **Windows 95 / 98 / ME**, type  
`edit c:\windows\hosts`



3. The hosts file opens in MS-DOS Editor.

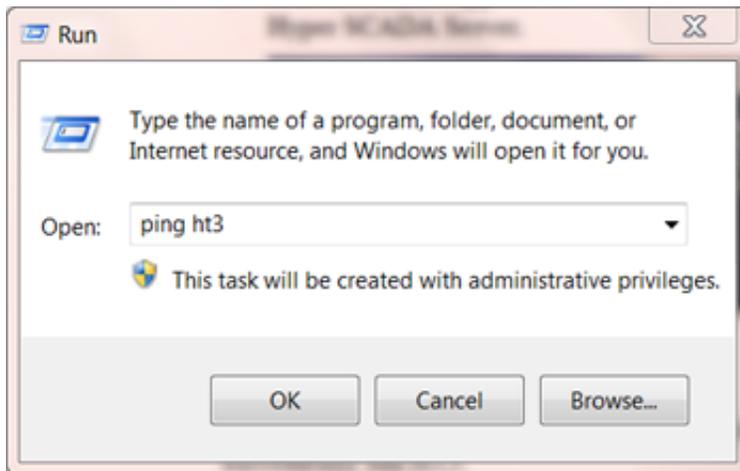
```
C:\Windows\system32\edit.com
File Edit Search View Options Help
c:\windows\system32\drivers\etc\hosts
# This file contains the mappings of IP addresses to host names. Each
# entry should be kept on an individual line. The IP address should
# be placed in the first column followed by the corresponding host name.
# The IP address and the host name should be separated by at least one
# space.
#
# Additionally, comments (such as these) may be inserted on individual
# lines or following the machine name denoted by a '#' symbol.
#
# For example:
#
# 102.54.94.97 rhino.acme.com # source server
# 38.25.63.10 x.acme.com # x client host
#
# localhost name resolution is handled within DNS itself.
# 127.0.0.1 localhost
# ::1 localhost
#
192.168.10.14 ht3
192.168.10.192 hypertacii
```

4. Place your cursor on a line below the file's comments - lines preceded by a pound sign (#) - and do the following:
  - A. Type xxx.xxx.xxx.xxx (where xxx.xxx.xxx.xxx represents the Hyper SCADA Server's IP address)
  - B. Press the **Tab** key
  - C. Type *ht3*
5. Select **Save As** from the **File** menu. Verify that the name **hosts** appears in the **File Name** field and click **OK**.

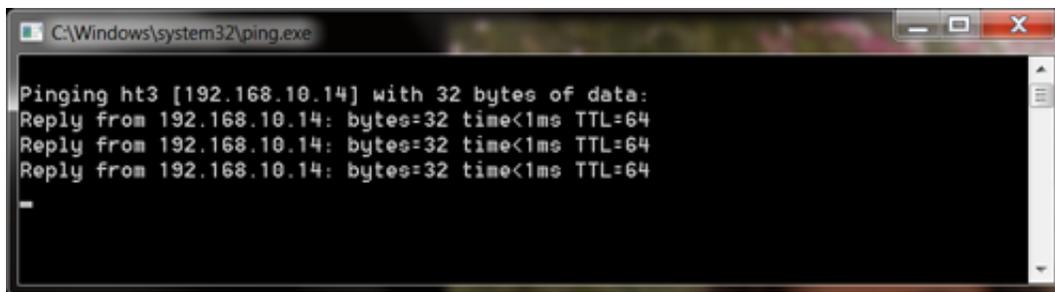
### Test Connection to Hyper SCADA Server

After the host file has been edited and saved, use the ping command to verify that your workstation can connect to the Hyper SCADA Server using the assigned host name.

1. On the Windows taskbar, click the **Start** button, and then click **Run**.
2. Type *ping ht3* in the **Run** dialog box and click **OK**.



3. A DOS window appears on screen and indicates if a reply has been received from the Hyper SCADA Server.



## Change Browser Settings

Several changes must be made to Internet Explorer's security settings before you can successfully run HT3.

1. Start Internet Explorer.
2. Select **Internet Options** from the **Tools** menu.
3. Click the **Security** tab and select the **Local intranet** zone.
4. Click **Custom Level...**
5. In the **Security Settings** dialog box, enable the following:
  - All of the options listed under **ActiveX controls and plug-ins**
  - All of the options listed under **Cookies**
6. Click **OK** at the **Security Settings** dialog box.
7. Click **OK** at the **Internet Options** dialog box.

## Install Plug-Ins and Java Policy File

1. Start Internet Explorer.

2. In Internet Explorer's **Address** box, type *ht3* (the host name assigned to your Hyper SCADA Server).
3. If the necessary plug-ins are not already installed, the HT3 Plug-Ins page is loaded .  
(**Note:** If the HT3 Plug-Ins page does not automatically load, type *http://ht3/ht3/plugins/index.html* in Internet Explorer's **Address** box.)
4. Follow the instructions on the page to install the required HT3 files and plug-ins.

## Start HT3

1. When installation of the plug-ins and the Java policy file is complete, type *ht3* in Internet Explorer's **Address** box.
2. On the HT3 login page, enter your **Login** and **Password** and click **OK**.
3. Bookmark HT3 in your browser or create a shortcut to HT3 on your Windows desktop.

# Obtaining Support

Mail user feedback, bug reports, questions, and software suggestions to:

Data Flow Systems, Inc.  
605 N. John Rodes Blvd.  
Melbourne, FL 32934

You can also obtain support by:

Visiting our web site (<http://www.dataflowsys.com>) and clicking the Help Desk button.

Sending email to: [service@dataflowsys.com](mailto:service@dataflowsys.com)

Calling us directly at 321-259-5009