Inform.NET

Read Me - Server Installation
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BEFORE YOU BEGIN!

STOP! Before installing Inform.NET, ensure the following requirements are met:

1. Required server hardware and system software are installed.
2. Required user login permissions to install and configure all components on server.
3. Supported ATGs and end-user web browsers. (Refer to the Inform.NET administrator manual for details on how to ‘bulk upload’ ATG information and configure Inform.NET for end-user use.)
1. REQUIREMENTS TO INSTALL INFORM.NET ON SERVER

Inform.NET is an Enterprise level software package to be installed on a server.

1.1 Minimum Specifications

- Dedicated server with no other applications running beyond required Inform.net components
- A physical server is recommended, though virtual machine is supported.
- Server hardware must meet minimum specs (see Table 1). For higher performance options (see Table 2).

<table>
<thead>
<tr>
<th>Table 1. Minimum Server Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU Cores:</strong> XEON class processors @ 2Ghz or greater and 1 MB L2 Cache per core</td>
</tr>
<tr>
<td>Physical Server (recommended)</td>
</tr>
<tr>
<td>4 Cores: 2 Dual Core Processors with hyper-threading enable</td>
</tr>
<tr>
<td>Memory</td>
</tr>
<tr>
<td>Disk</td>
</tr>
<tr>
<td>Network Card</td>
</tr>
<tr>
<td>Modem Card</td>
</tr>
</tbody>
</table>

**Support Considerations:**

- Level of support from Veeder-Root: Certified and fully supported for Inform.NET | Not certified and partial support for Inform.NET
- Licensing: License bound to Physical Server where installed. | License bound to Machine name and CPU ID of virtual machine. No support for hardware abstraction at this time. Do not move virtual machine or license fails.
- Max polling throughput (IP ATGs, low latency network, inventory only poll): 25 sites/minute. Max supported TCP resources setting of 25 (under Admin user, Global settings) | 20 sites/minute. Max supported TCP resources setting of 20 (under Admin user, Global settings)

<table>
<thead>
<tr>
<th>Table 2. Higher Performance Server Options (assume Physical Server)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU Cores:</strong> XEON class</td>
</tr>
<tr>
<td>Mid-Grade Performance</td>
</tr>
<tr>
<td>8 Cores: 2 Quad Core Processors with hyper-threading enabled. 2MB L2 Cache per core</td>
</tr>
<tr>
<td>Memory</td>
</tr>
</tbody>
</table>
Required Microsoft System Components installed on a single Server:

- Microsoft Windows Server 2008 or 2008 R2, Standard Edition or greater
- Microsoft SQL Server 2008 or 2008 R2, Standard Edition or greater, with:
  - SSRS (SQL Server Reporting Services)
  - Default collation of SQL_Latin1_General_CP1_CI_AS
  - Configure Database mail and set-up SSRS for e-mail delivery (instruction found in readme.doc)
- Microsoft Internet Information Services 7.0 /7.5; with 6.0 compatibility components in either case
- Microsoft .NET Framework 4.0
- Static components for IIS 7.0
- SSRS configured without SSL

### Table 2. Higher Performance Server Options (assume Physical Server)

<table>
<thead>
<tr>
<th></th>
<th>Mid-Grade Performance</th>
<th>Premium Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disk</td>
<td>2 X 100 GB, RAID 1</td>
<td>4 X 250 GB, RAID 10, 7200 rpm drives</td>
</tr>
<tr>
<td>Network Card</td>
<td>100 Mbit NIC with access to ATGs</td>
<td>100 Mbit NIC with access to ATGs</td>
</tr>
<tr>
<td>Max polling throughput (IP ATGs, low latency network, inventory only poll)</td>
<td>125 sites/minute. Max supported TCP resources setting of 125</td>
<td>800 sites/minute. Max supported TCP resources setting of 400</td>
</tr>
</tbody>
</table>
2. ADMINISTRATOR PERMISSIONS ON SERVER

Proper permissions are very important for Inform.NET to install and operate successfully. Inform.NET installation requires the creation of, and access to, two user accounts:

- Server Administrator user account
- SQL Database user account.

2.1 Server Administrator User Account

These user credentials are needed to perform tasks on the server such as granting access to folders (Inform.NET folders), restarting services, accessing SSRS, creating Log files, etc… This user can be setup as a Local User or a Domain user, but should be a member of Group Administrators or Local Administrators (this topic will be covered later in the installation notes, but please note, certain admin privileges are essential especially since service creations and deletion may be needed by the user.)

2.2 SQL Database User Account

Similar to the server user, this user can be a local account or a domain account, but should be properly configured on the SQL Server instance which should allow both Windows Integrated and SQL Authentication. The SQL Server Role should be at minimum PUBLIC & DBCREATOR, though higher credentials may be setup and the specific user can be listed as the Inform.NET Database Owner.

Administrator means Administrator. It is critical the proper permissions have been established in order for the application to install and run smoothly. In this manual we will cover generic setups provided to help demonstrate what is needed, but every network is different, so please consult your Network Administrator or Database Administrator on group policies which may need to be considered to properly configure permissions.
3. ATG AND END-USER BROWSER REQUIREMENTS FOR INFORM.NET

Additional requirements to use Inform.NET:

1. Ensure Automatic Tank Gauge make/model/firmware are supported by Inform.NET (Table 3)
2. Ensure end-user browser is Internet Explorer 7/8/9 with scripting enabled

<table>
<thead>
<tr>
<th>Supported Automatic Tank Gauges</th>
<th>Level of Support</th>
<th>Firmware Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veeder-Root Model TLS-2</td>
<td>Monitor</td>
<td>Version 1 +</td>
</tr>
<tr>
<td>Veeder-Root Model TLS-300 (series)</td>
<td>Monitor</td>
<td>Version 15 or Greater</td>
</tr>
<tr>
<td>Veeder-Root Model TLS-350</td>
<td>Monitor &amp; Manage</td>
<td>Version 15 or Greater</td>
</tr>
<tr>
<td>Veeder-Root Model TLS-450</td>
<td>Monitor &amp; Manage</td>
<td>Version 2 or Greater (Except Version 3b &amp; 3c)</td>
</tr>
<tr>
<td>INCON TS Series: TS1000, TS1001, TS2001</td>
<td>Monitor</td>
<td>latest firmware with ATG in VR emulation mode</td>
</tr>
<tr>
<td>Franklin Fuel Systems Model TS-550, TS-5</td>
<td>Monitor</td>
<td>latest firmware with ATG in VR emulation mode</td>
</tr>
<tr>
<td>Fafnir VISY-Command and VISY-Command XL</td>
<td>Monitor</td>
<td>latest firmware with ATG in VR emulation mode</td>
</tr>
<tr>
<td>OMNTEC OEL8000</td>
<td>Monitor</td>
<td>Latest firmware</td>
</tr>
<tr>
<td>H protocol ATGs</td>
<td>Inventory only</td>
<td>Latest firmware</td>
</tr>
</tbody>
</table>

Level of support: ‘monitor’ support means typical ATG polling commands, while ‘manage’ includes functionality used to manage ATG configuration (see operator manual for details). To meet firmware requirements, download latest version and have certified technician install. VR emulation mode refers to Veeder-Root emulation mode, whereby non Veeder-Root gauges accept basic Veeder-Root commands.

Other ATG make/model/firmware combinations may work with Inform.NET, but are not officially supported. Future releases of Inform.NET will likely include additional ATG models.
3.1 Browser Settings – Enable Scripting

Inform.NET supports Internet Explorer 7.0, 8.0 and 9.0, but occasionally due to browser security settings or updated versions of the browser, you may experience a script error.

![Image of a script error message in Internet Explorer]

To prevent browser errors, please follow the instructions below:

1. Under Tools in Internet Explorer, click on Internet Options.
2. Click on the Security Tab
3. Under the security tab click on Custom Level.
4. Inside the Scripting section, insure Enable Scripting is marked enabled. If for any reason, you receive a ‘Script Timeout error’, please download the patch using the following link:

   http://support.microsoft.com/kb/175500

   Once the above link is open, click on “FIX IT” image and download "MicrosoftFixit50403.msi" from the page.
3.2 Database Mail Settings

Inform.NET does perform email functions, but takes advantage of the Database Mail configured through SQL. This part of the configuration should be performed after installation has been performed. To configure the database mail on SQL server perform following steps:

Step 1:

Right Click on Database Mail (From SQL server name -> Management -> Database Mail) and click on “Configure Database Mail” option (refer below screen).

Click Next from following screen:
It will open the below new Window. Select the first option from below screen and click on Next:

If database mail settings are not enabled on the server than it will prompt for the enable database mail settings.
By Clicking on Next button, following screen will be opened.
User can enter the profile name “Inform.NET” into above screen, and by clicking on “Add” button into above screen, following screen will be opened.
By Clicking on “New Account” button, following screen will be opened:

User can enter the account name and other information like SMTP server information with credentials, and outgoing Email address and display name.
By clicking on OK button Account information will be saved and displayed under SMTP accounts information. See below screen.

Click on Next button, following screen will be opened, where all the existing profiles will be displayed. Make the “Inform.NET” profile public and Select Yes into Default Profile.
By clicking on Next button in above screen, following screen will be opened, where user can specify the different mail parameters.
By Clicking on “Next” button Final Overview screen will be displayed and Click on Finish button to create the database mail settings.

After creating a mail profile, you can send the test mail using following steps:

1. Right Click on **Database Mail (From SQL server name -> Management -> Database Mail)** and click on “Send Test E-mail” option.
3.3 How To Setup SSRS For Email Delivery

When setting up a subscription inside SSRS, you have a selection for delivery method. The default is “File Share location”. If you want your scheduled reports to be automatically delivered via email, please visit the following link:

4. HOW TO VERIFY INSTALLATION REQUIREMENTS

4.1 How to verify .NET Framework 3.5

One of the essential components is .NET Framework 3.5, though other versions of the .NET Framework may be available, it is necessary to have this version installed on the server.

To verify the proper version is installed:

1. Click on the START menu on the lower left corner of the screen
2. Select Control Panel
3. Select Add/Remove Programs
4. Browse the list of installed components and applications for Microsoft .NET Framework 3.5 as shown below:
4.2 How To Verify IIS 7 And Compatibility Components Are Installed

Internet Information Services (IIS) is Microsoft’s web server application. Inform.NET supports 7.0 but IIS 6.0 compatible components must be installed.

The most common way to access IIS is to select Administrative Tools then select IIS from the menu (see below):
IIS 7.0 – It is accessible by going through the Administrative Tools menu, but as you can see below it looks entirely different:

Inform.NET does support IIS 7.0, but it does require that the 6.0 compatibility components are installed. To install IIS 6.0 compatibility components:

1. Go to the Control Panel on the server.
2. Select Programs and Features page in the Windows control panel.
3. Select Turn Windows features on or off.
To verify - As shown above, they are listed in the Web Server (IIS) menu.

4.3 IIS .NET components Settings

One item that needs to be verified is if IIS has been configured to allow ASP.NET v2.0.50727 components. In IIS 6, this is accessed by going to the IIS Manager and selecting Web Service Extensions. You should see the .NET component marked “Allowed”.
In IIS 7.0, please verify the Application Pool by double clicking Inform.NET’s application pool:
4.4 How To Setup A User On Windows Server 2008

This section will demonstrate how to setup the Server Administrator on a Windows Server 2008 machine.

**Step 1 – Open the Computer Manager browser**

Right click “My Computer” and select “Manage” and the Computer Manager window will open:

Under the Local Users and Groups menu, you will see 2 Folders. The USERS folder is a method of adding a local user. The GROUPS menu allows you to add domain users to the server and give proper permissions. Please remember that you may set up a Server Account in a couple of different manners so please defer to your local Network Administrator on proper configuration. The options listed below are only illustrations on how to setup a user based on 2 different methods.
4.4.1 TO SET UP LOCAL USER

To add a new Local User, Right-click and Select “New User…”

Then simply add a local user, but be sure to UNCHECK the box “User must change password at next logon” and “Password never expires” should be checked.
4.4.2 TO SET UP LOCAL GROUP USER

Under the Groups folder, you’ll see a list of roles that users can be assigned. The user we will be adding is an Administrator user.

Open the ADMINISTRATORS group as shown below:
Please notice the Users that are added to the Administrators group can consist of Domain level users as well as local users. Simply click “Add..” and a new window will open which will allow you to browse for the user you wish to add.

![Select Users, Computers, or Groups](image)

**4.5 How To Setup A SQL To Allow SQL Authentication**

In this section, we will review how to configure the SQL server. Inform.NET takes advantage of both Windows Integrated Security as well as SQL Authentication, so the first step is to make sure the SQL user security has been configured.

1. Open SQL Server Management Studio.
2. Connect to SQL Instance (typically Windows Integrated method if the Management Studio was installed properly).
3. Right click SQL Instance and select PROPERTIES.
4. Double click the SECURITY menu item on the left hand section.
5. Verify that SQL Server and Windows Authentication Mode is selected.
4.6 How To Setup A User On SQL Server 2008

From the SQL Server Management Studio, you’ll see the SQL Instance on the left menu if connected properly. In the pane, you’ll see a list of items including “Database”, “Security”, “Server Objects”, “Management”, etc…

To create a SQL user:

1. Open the Security folder on the left hand menu.
2. Right Click Logins and select “New Login”.
3. Select either Windows Authenticated user or SQL server authentication.
4. Create Login name or select it from Domain list.
5. Since this should be a service account, please uncheck “Enforce Password Policy”.
4.7 Permissions for SQL User

It is important to make sure the SQL user account has the proper permissions. The minimum level of security for the application to install is PUBLIC and DBCREATOR. Under the Login User's screen in the previous section, there is a menu on the left-hand side "Server Role". As shown below, the following items MUST be selected.
4.8 How to setup SSRS configuration

Inform.NET takes advantage of SSRS (SQL Server Reporting Services) for reporting purposes. This integration allows for a vast number of capabilities, but in order for reporting to be displayed successfully, it is important that SSRS be installed and configured properly.

Please check with your Network Administrator or Database Administrator to insure SSRS components were installed. Once installed, please verify the following configurations.

4.8.1 SQL 2008 SSRS Configuration

As described above and illustrated for SQL 2005 SSRS configuration, to setup SSRS for 2008, navigate through the START menu, navigate to the Microsoft SQL Server 2008 selection and under the Configuration Tools, then select REPORTING SERVICES CONFIGURATION as shown below.

The Reporting Services Configuration Manager is similar to the 2005 version, but the interface is dif-
There are 4 sections that need to be configured. The images below will illustrate a typical installation, but again, please refer to your Database Administrator especially if SSRS is already implemented for other websites on your network. These are provided as a guide and educational purposes and cover the four areas.

- Service Account
- WebService URL
- Database
- Report Manager URL
4.9 How to verify SSRS is configured properly

If the above sections were properly configured, you can test to verify if it is running properly by following the following links:

(replace servername with your servername or localhost if running on the server itself)

http://[servername]/Reports
http://[servername]/ReportServer

4.10 Collation & localization settings for non-U.S. gauges

Inform.NET does support a multi-language SQL installation, but in order to do so there are a few settings that need to be setup and/or verified. The Collation Settings for the Inform.NET database needs to be set at `SQL_Latin1_General_CP1_CI_AS`. In addition, to insure data is properly inserted into the Database, the database user entered at the time of installation (SQL user) needs to be set to an English language as its default.