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1. Installation and Configuration Introduction

This guide provides installation and configuration instructions for the complete suite of TG products (i.e., TGAudit, TGSecure, etc.) and the web application (TGCentral) used to manage TG products from a central location.

Installation

Use this guide to do the following:

• Install TG products onto an agent (IBM i server) machine
• Install TGCentral onto a host (web server)--either a Windows or Linux machine

Configuration

Use this guide to do the following:

• Configure TG products installed on an agent
• Configure TGCentral installed on a web server
2. Agent

2.1. IBM i

IBM® i OS Instructions

Use this section to do the following:

- Check the IBM i OS requirements
- Install TG products on an agent
- Uninstall TG products from an agent
- Upgrade TG products on an agent

See also
TGMenu Configuration

IBM® i OS Requirements

TG products are supported on the following IBM i OS versions:

- V6R1
- V7R1
- V7R2
- V7R3

Important: This product does not support the emulator (workstation) display size of 24x80. You must change the display to size to 27x132. If you do not change the display size, you will receive the error message CPF4169.

See also
Change Emulator Display Size
IBM i Instructions
TGMenu Configuration

Install TG Products on IBM i Series Server

Use this task to install the available TG products on an IBM i Series server. This task describes the following:

Step 1: Extract the compressed installation files
Step 2: Locate the installation program
Step 3: Log into the FTP IBM i Sever
Step 4: Transfer and run installation program

Extract Installation Files

To extract the installation files

1) Locate the TGINSTALL.zip.
2) Save the zip file to the desired location on the server.
3) extract the files.

**Locate the Installation Program**

**To Locate the SVF file**
1) Access the unzipped installation files.
2) Locate the `tginstall.svf` file.

**Log into FTP IBM i Server**

**To log into the FTP IBM i server**
1) At a Windows command prompt, enter the following:
   
   FTP `<IBM i system name>`

2) Press ENTER.

**Transfer and Run Installation Program**

**To FTP the files and run the installation program**
At the FTP prompt, execute the following commands:

<table>
<thead>
<tr>
<th>Command</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change transfer mode to binary</td>
<td>BIN</td>
</tr>
<tr>
<td>Create save file on IBM i server</td>
<td>QUOTE RCMD CRTSAVF QGPL/TGINSTALL</td>
</tr>
<tr>
<td>Transfer tginstall.svf to IBM i</td>
<td>PUT c:&lt;path to&gt;\tginstall.svf QGPL/TGINSTALL</td>
</tr>
<tr>
<td>Restore TGINSTALL library</td>
<td>QUOTE RCMD RSTLIB TGINSTALL DEV(*SAVF) SAVF(QGPL/TGINSTALL) MBROPT(*ALL) ALWOBJDIF(*ALL)</td>
</tr>
<tr>
<td>Run installer</td>
<td>QUOTE RCMD TGINSTALL/TGINSTALL INSTYPE(*INSTALL) EULA(*ACCEPT) BATCH(*NO)</td>
</tr>
</tbody>
</table>

**See also**

*IBM i Instructions*

*TGMenu Configuration*

**Uninstall TG Products from IBM i Series Server**

Use this task to uninstall TG products from your IBM i Series server. This task describes the following:

**Step 1:** Log into the IBM i Server
**Step 2:** Remove the TG product files
**Step 3:** Delete the TGINSTALL library
**Step 4:** Delete the TGOWNER object
Step 5: Delete the TGAUTL object

Log into the IBM i Server

To access the IBM i Main Menu
- Sign into your IBM i server.

Remove the TG Product Files

To remove the TG product files
1) At the Selection or command prompt, enter TGINSTALL/TGINSTALL INSTYPE(*REMOVE).
2) Press Enter.

Delete the TGINSTALL Library

To delete the TGINSTALL library
1) At the Selection or command prompt, enter DTLIB LIB(TGINSTALL).
2) Press Enter.

Delete the TGOWNER Object

To delete the TGOWNER object
1) At the Selection or command prompt, enter DLTUSRPRF USRPRF(TGOWNER).
2) Press Enter.

Delete the TGAUTL Object

To delete the TGAUTL object
1) At the Selection or command prompt, enter DLTAUTL AUTL(TGAUTL).
2) Press Enter.

See also
IBM i Instructions

Upgrade TG Products on IBM i Series Server

Use this task to upgrade the available TG products on an IBM i Series server. This task describes the following:

Step 1: Extract the compressed installation files
Step 2: Locate the installation program
Step 3: Log into the FTP IBM i Server
Step 4: Transfer the installation program
Step 5: Restore the install library
Step 6: Run the upgrade command
Extract Installation Files

To extract the installation files
1) Locate the tginstall.zip.
2) Save the zip file to the desired location on the server.
3) Extract the files.

Locate SVF File

To locate the SVF file
1) Access the unzipped installation files.
2) Locate the tginstall.svf file.

Log into FTP IBM i Server

To log into the FTP IBM i server
1) At a Windows command prompt, enter the following:
   `FTP <IBM i system name>`
2) Press ENTER.

Transfer Installation Program

To transfer the installation file
At the FTP prompt, execute the following commands:

<table>
<thead>
<tr>
<th>Command</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change transfer mode to binary</td>
<td>BIN</td>
</tr>
<tr>
<td>Delete old save file on IBM i server</td>
<td>QUOTE RCMD DLTOBJ OBJ(QGPL/TGINSTALL) OBJTYPE(*FILE)</td>
</tr>
<tr>
<td>Create new save file on IBM i server</td>
<td>QUOTE RCMD CRTSAVF QGPL/TGINSTALL</td>
</tr>
<tr>
<td>Transfer tginstall.svf to IBM i server</td>
<td>PUT c:&lt;path to&gt;\tginstall.svf QGPL/TGINSTALL</td>
</tr>
</tbody>
</table>

Restore Installation Library

To restore the installation library
At the FTP prompt, execute the following commands:
Run Upgrade Command

To run the upgrade command
1) Sign into your IBM i server.
2) At the Selection or command prompt, enter `TGINSTALL/TGINSTALL INSTYPE(*UPGRADE) EULA(*ACCEPT) BATCH(*NO)`.
3) Press Enter.

See also
- IBM i Instructions
- TGMenu Configuration

2.2. Agent Configuration

Configure TGMenu

Use this task to configure the TGMenu (which provides access to TGAudit and TGSecure). This task describes the following:

Step 1: [Log into the IBM i Main Menu]
Step 2: [Add License Key]
Step 3: [Add Authorized Users]
Step 4: [Configure NetServer]
Step 5: [Change Emulator Display Size]
Step 6: [Enable Report Filter Modifications]
Step 7: [Apply Fix]
Step 8: Display List of Fixes

See also

IBM i OS Requirements

**Step 1 - Log In**

Use this task to log in from the TG - Main menu.

To access the TG Main menu

1) Sign into your IBM i server.
2) At the **Selection or command** prompt, enter **TGMENU**.
3) Press **Enter**.

![TG Main menu](image)

**Note:** The TG Main menu is displayed.

See also

TGMenu Configuration

**Step 2 - Add License Key**

Use this task to do the following:

- Obtain license key
- Add license key
- Display product version
- Display product license status

To use the product, you must have a valid license key. If a valid license key is not present, a message appears in the **System Operator (QSYSOPR)** message queue.

**Note:** A 14-day trial license is provided at the time of installation, so you can immediately begin using the product, but if you purchased a license, add it immediately to avoid any issues.
Obtain License Key

To obtain a license key

1) Access the customer portal at [www.trinityguard.com](http://www.trinityguard.com).
2) Create a ticket requesting a license key.

*Note*: A single license key will be issued. The key will provide access to all licensed TG products. See Display License Status for instruction on viewing the license status of available TG products.

Add License Key

To add a license key

1) Access the TG Main menu.
2) At the **Selection or command** prompt, enter **80** (Licensing Status).
4) Press Enter.
5) Press the F6 (Add Key) function key on your keyboard.
6) Enter the license key.
7) Press Enter.

Display Product Version

To display product version

1) Access the TG Main menu.
2) At the **Selection or command** prompt, enter **80** (Licensing Status).
4) Press Enter.
5) Under **License Information**, see the **Product Version** field.

Display Product License Status

To display product license status

1) Access the TG Main menu.
2) At the **Selection or command** prompt, enter **80** (Licensing Status).
4) Press Enter.
5) Under **License Information**, see the product status (Y - licensed, N - not licensed).

See also

[TGMenu Configuration](#)

**Step 3 - Add Authorizing Users**

Use this task to do the following:

- Display list of authorized users
- Add authorized user

*Important*: To use the product, the administrator must grant you access.
Tip: If you are the administrator, don't forget to add yourself.
During installation, the following users are automatically authorized to use the product:

- QSECOFR
- The user profile that installed the product

**Display Authorized Users**
Use this task to display the list of current authorized users.

To display authorized users
1) Access the TG Main menu.
2) At the **Selection or command** prompt, enter **70** (Work with TG Product Users).
3) Press Enter.

Note: The **Edit Authorization List** interface displays.

**Add Authorized Users**
Use this task to add an authorized user.

To add authorized users
1) Access the **Edit Authorization List** interface.
2) Press the **F6** (Add new users) function key on your keyboard.
3) In the **User** column, enter the user profile of the user you want to add.
4) In the **Object Authority** column, enter ***ALL**.
5) Press Enter twice.

See also
TGMenu Configuration

**Step 4 - Configure NetServer to Enable Report Viewing**
Use this task to configure a share drive on the NetServe. This allows the system to save and immediately display reports generated in HTML, XML, or CSV formats on your screen.

- Enable additional report outputs (XML, HTML, CSV)
- Create share folder
- Restrict permission to share folder
- Add IBM i Server to host table
- Map network drive to share folder

**Important:** Because this share folder stores report outputs, it is important to ensure permissions to the folder are restricted to only those individuals with appropriate job-related responsibilities.

**Enable Additional Report Outputs**
Use this task to enable the displaying of XML, HTML, and CSV formats of reports.

To enable displaying of report outputs
1) Start NetServer.
2) At an i5/OS command, enter the following:
   ```
   STRTCPVRV SERVER(*NETSVR)
   ```
3) Click Enter.

Create Share Folder

Use this task to create the share drive on which reports are to be saved.

To create a share folder on which to save the report outputs

1) Create a NetServer file share called TrinityGuard:
   ```
   System i Navigator → [Your Connection] → Network → Servers → TCP/IP
   ```
   ![System i Navigator](image1)
   **Figure: System i Navigator**
   
   2) Right-click i5/OS NetServer and select Open.
   3) Right-click Shared Objects, and select New → File.
   ![i5/OS NetServer](image2)
   **Figure: i5/OS NetServer**

4) On the General tab, assign the new share the following attributes:
   - Name: TrinityGuard
   - Description
   - Access level
   - Maximum number of users
– Path name: /TrinityGuard
5) Click OK.

Figure: i5/OS NetServer File Share

**Restrict Permission to Share Folder**

To restrict permission to the share folder

1) Right click on the TRINITYGUARD share and select Permissions.

Figure: i5/OS NetServer

2) Click on the Add button:
3) Enter the profile name for the user you want to add.

Figure: Trinityguard – Add Users and Groups
4) Click OK.
5) Select the desired permissions levels.

![Trinityguard Permissions](image)

**Figure: Trinityguard Permissions**

6) Click OK.

**Tip:** By default, when a user is authorized to use the product through the green screen menu, they inherit permissions to this folder through the product authorization list.

**Add IBM i Server to Host Table**

**To add IBM i server to the host table**

Update the hosts table on your PC to include the IBM i server IP address and server name.

1) Open a text editor.
2) Edit the file `C:\Windows\System32\drivers\etc\hosts`:

![Host File](image)

**Figure: Host File**
Map Network Drive to Share Folder

To map a network drive to the share folder

**Note:** The specific steps for this task will vary based on your operating system, so use these instructions as a guide, not as an absolute.

1) Open **My Computer**.
2) Click on **Map network drive**.

![Map Network Drive](image)

**Figure: My Computer**

3) Select a drive letter.
4) Enter the path to the **TrinityGuard** share folder.

**Important:** Use the IBM i system name, not the IP address.

5) Select that the following options:
   - **Reconnect at logon**
   - **Connect using different credentials**

![Map Network Drive](image)

**Figure: Map Network Drive**

6) Click the **Finish** button.
7) Enter your i5/OS user profile and password.
8) Select the **Remember my credentials** option.
9) Click **OK**.
Alternatively, you can map the network drive from a Windows command prompt by using the following command:

```
NET USE * \<IBM i Server Name>\TrinityGuard /USER:IBM i-username IBM i-password
```

See also

TGMenu Configuration

---

**Step 5 - Change Emulator Display Size**

Use this task to change the emulator (workstation) display size to 27x132.

**Important:** This product does not support the emulator (workstation) display size of 24x80.

If you are not using the display size of 27x132, you will receive the error message **CPF4169**.

**To change the emulator display size**

1) Access the TG Main menu.
2) From the IBM i session menu, click Communication > Configure.

3) In the Type of emulation group box, change Size to **27x132**.
4) Click **OK**.

See also

TGMenu Configuration

---

**Step 6 - Enabling Report Filter Modifications**

Use this task to set the LMTCPM (Limited Capabilities) attribute to *NO*.

**Important:** If this attribute is set to *YES*, the user will have limited editing capabilities that might impact filtering.
To set the LMTCPM attribute to *NO

1) Access the IBM i Main menu.
2) At the Selection or command prompt, enter 3 (General system task)
3) Press Enter.
4) At the Selection or command prompt, enter 10 (Security)
5) Press Enter.
6) At the Selection or command prompt, enter 6 (Work with user profiles)
7) Press Enter.
8) In the User profile field, enter the desired user ID.
9) Press Enter.
10) In the OPT column beside the user ID, enter 2 (Change).
11) Press Enter.

Note: The Change User Profile interface is displayed.

Alternatively, use the CHGUSRPRF command to access this interface.

12) In the Limit capabilities field, enter *NO.
13) Press Enter.

See also

TGMenu Configuration

2.3. Fixes

Fix Files

TGFix is a tool introduced in version 2.0 that allows you to install fixes via the TG menu quickly and easily. The feature also includes verification features that ensure the fix is installed properly.

See also

Save Fix to Agent Server
Manage Fixes
Display List of Fixes

Save Fix to Agent Server

Use this task to save the TGFix file to the agent server. You must FTP the fix file to the server before you can apply it.

To save the fix to the agent server

1) Open a DOS or command window.
2) Type the following command, substituting the name of the iSeries server for [system-name].

    FTP [system-name]

Alternatively: You can use the iSeries IP (internet address) instead of the system name.

3) Use the iSeries command GO TCPADM to find the address.
4) Select option 7.
5) Select option 1.
6) Type a user ID at the FTP prompt and press Enter.
7) Type the password at the FTP prompt and press Enter.
8) Type the following command to create the TGFIX library if it does not exist on your iSeries server:
   ```
   quote rcmd crtlb TGFIX
   ```
9) Type the following command to create the save file if it does not exist on your iSeries server:
   ```
   quote rcmd crtsavf TGFIX/TGF018001
   ```
10) Type the following command to transfer the file using binary image mode:
    ```
    binary
    ```
11) Type the following command to identify the path, where [path] is the folder where you saved the file in Step 2:
    ```
    lcd [path]
    ```
12) Type the following command to transfer the file from the PC to the iSeries:
    ```
    put TGF018001.svf TGFIX/TGF018001
    ```
13) Type the following command to end FTP:
    ```
    quit
    ```
14) Type the following command to close the DOS window:
    ```
    exit
    ```

See also

- Fix Files
- Apply Fix
- Display List of Fixes

## Manage Fixes

Use this task to do the following:

- **Apply fix**
- **Remove fix**

**Note**: If you are working with a newly release version, there might not be fixes necessary/available. You will be notified as fixes become available.

### Apply Fix

Use this task to apply a fix.

**Tip**: The fix file must be saved on the agent server before attempting to apply it.

**To apply a fix**

1) Access the TG Main menu.
2) At the **Selection or command** prompt, enter **TGFIX**.
3) Press the **F4** (Prompt) function key.
Note: The TG Fix Manager (TGFIX) interface is displayed.

4) Complete the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fix ID</td>
<td>Enter the fix ID, which should be provided to you in the following format:</td>
</tr>
<tr>
<td></td>
<td>(TGFVVVXXX)</td>
</tr>
<tr>
<td></td>
<td>Where:</td>
</tr>
<tr>
<td></td>
<td>TGF = TG Fix</td>
</tr>
<tr>
<td></td>
<td>VVV = Three-digit version number.</td>
</tr>
<tr>
<td></td>
<td>FFF = Three-digit numeric number (assigned sequentially) to each fix</td>
</tr>
<tr>
<td></td>
<td>Note: For example, TGF0200001 would be the 1st (001) TG fix for version 2.0</td>
</tr>
</tbody>
</table>

| Fix action to perform  | Enter *APY                                                                  |

5) Press Enter.

Note: The TGFix program performs validations before applying the fix (e.g., is the fix file present on the agent server, has the fix already been applied, etc.)

Remove Fix

Use this talk to remove a fix.

To remove a fix

1) Access the TG Main menu.
2) At the Selection or command prompt, enter TGFIX.
3) Press the F4 (Prompt) function key on your keyboard.

Note: The TG Fix Manager (TGFIX) interface is displayed.

4) Complete the following fields:

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fix ID</td>
<td>Enter the fix ID, which should be provided to you in the following format:</td>
</tr>
<tr>
<td></td>
<td>(TGFVVVXXX)</td>
</tr>
<tr>
<td></td>
<td>Where:</td>
</tr>
<tr>
<td></td>
<td>TGF = TG Fix</td>
</tr>
<tr>
<td></td>
<td>VVV = Three-digit version number.</td>
</tr>
<tr>
<td></td>
<td>FFF = Three-digit numeric number (assigned sequentially) to each fix</td>
</tr>
<tr>
<td></td>
<td>Note: For example, TGF0200001 would be the 1st (001) TG fix for version 2.0</td>
</tr>
</tbody>
</table>

| Fix action to perform  | Enter *RMV                                                                  |

5) Press Enter.

See also

Fix Files
Save Fix to Agent Server
**Display List of Fixes**

Use this task to display the list of fixes applied to the agent.

**To display the list of fixes**

1) Access the TG Main menu.
2) At the **Selection or command** prompt, enter **80** (Licensing Status).
3) Press **Enter**.
4) Press the **F6** (Add Key) function key on your keyboard.
5) Enter the license key.
6) Press **Enter**.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fix ID</td>
<td>The Fix ID is based on the following nomenclature: <strong>TGFVVVFFF</strong> Where: TGF = TG Fix, VVV = Three-digit version number, FFF = Three-digit numeric number (assigned sequentially) to each fix</td>
</tr>
<tr>
<td></td>
<td><strong>Note</strong>: For example, TGF020001 would be the 1st (001) TG fix for version 2.0 (020)</td>
</tr>
<tr>
<td>Applied Date</td>
<td>Date on which the fix was applied to the system</td>
</tr>
<tr>
<td>Apply User</td>
<td>User who applied the fix</td>
</tr>
</tbody>
</table>

See also

- [Fix Files](#)
- [Manage Fixes](#)
3. Central

3.1. Windows

Windows® OS Instructions

Use this section to do the following:

- Check the Window OS requirements
- Install TGCentral on a Windows machine
- Uninstall TGCentral on a Windows machine
- Upgrade TGCentral on a Windows machine

See also

TGCentral Configuration

Windows® OS Requirements

TGCentral is supported on the following Windows OS versions (64 bits):

- Windows 7
- Windows 8
- Windows 10
- Windows Server 2008
- Windows Server 2012
- Windows Server 2016

Prerequisites:

- Google Chrome (latest version)

Note: PostgreSQL (database) is not a prerequisite, but be aware that it is required (will be installed) as part of the TGCentral installation.

See also

Windows Instruction

TGCentral Configuration

Install TGCentral on Windows Server

Use this task to install TG Central on a Windows server. This task describes the following:

Step 1: Upload the compressed installation file to the Windows server

Step 2: Run the Installation Program

Step 1 - Upload Compressed Installation File to Server

To upload the compressed installation file to server
1) Locate the `tgcentral-xxx.exe`.
2) Use whatever method or tool you have available to upload the file to the Windows server.

**Step 2 - Run the Installation Program**

Use this task to run the installation program.

**Tip:** Installation of PostgreSQL is performed in the default port: 5432. Ensure this port is available. Also, make note that TGCentral is installed as a service.

**To run the installation program**

1) Navigate to the location of the extracted installation files.
2) Right-click on the `tgcentral-xxx.exe` program.
3) Select **Run as Administrator**.
4) Follow the instructions provided in the wizard.

**Note:** On completion of the installation, you will receive a notification. The notification displays the URL from which you need to complete the product configuration. You can also enter the URL manually into your browser (http://<ip address>:10000).

**Tip:** If you are given the option to select a browser, select Chrome. Chrome is required for the product configuration.

See also

*Windows Instruction*

*TGCentral Configuration*

---

**Uninstall TGCentral from Windows Server**

Use this task to uninstall TGCentral from a Windows Server.

**To uninstall TGCentral**

1) Access the location of the TGCentral program files.

**Note:** Unless the default path was changed at the time of installation, the files are commonly installed at `c:\program files(x86)\TGcentral`.

2) Right-click on the `tgcentral-uninstall.xxx.exe` program (where `xxx` is the version number).
3) Select **Run as Administrator**.
4) Follow the instructions provided in the wizard.

**Tip:** You can also use the uninstall feature available through the Windows menu or the Control Panel.

**Note:** As part of the uninstall process, the TGCentral database is deleted, but PostgreSQL is not removed.

See also

*Windows Instruction*

---

**Upgrade TGCentral from Windows Server**

Use this task to upgrade TGCentral from a Windows Server.
Follow the Windows installation instructions. The installer detects the previous version and proceeds to make the necessary updates.

See also
Windows Instruction
TGCentral Configuration

3.2. Linux

Linux® OS Instructions

Use this section to do the following:

- Check the Linux OS requirements
- Install TGCentral on a Linux machine
- Uninstall TGCentral on a Linux machine
- Upgrade TGCentral on a Linux machine

See also
TGCentral Configuration

Linux® Requirements

TG products are supported on the following Linux versions:

- RedHat/CentOS 6/7
- Ubuntu 12.04/14.04/16.04
- Debian 7/8
- SUSE 11/12

Prerequisites:

- PostgreSQL
- Google Chrome (latest version)

IMPORTANT: If Linux is your OS, then Internet access is required during the TG product installation so that the installer can download a copy of PostgreSQL 10. If Internet access isn’t available, then you must install PostgreSQL 10 for your specific OS version and architecture prior to running the TG product installer. You can download PostgreSQL 10 at https://www.postgresql.org/download/.

See also
Linux Instructions
TGCentral Configuration

Install TGCentral on Linux Server

Use this task to install the TGCentral on a Linux server. This task describes the following:

Step 1: Upload the compressed installation file to the Linux server
Step 2: Extract the compressed installation files
Step 3: Locate and run the installer script
Step 1 - Upload Compressed Installation File to Server

To upload the compressed installation file to server

1) Locate the `tgcentral-xxx.tar.gz` file (where xxx is the version number).
2) Use whatever method or tool you have available to upload the file to the Linux server.

Step 2 - Extract the Compressed Installation Files

To extract the installation files

1) Navigate to the location of the `tgcentral-xxx.tar.gz` file.
2) Use the `tar` (tap archive) command to extract the compressed files.
   At the command prompt, enter `tar -xzvf tgcentral-xxx.tar.gz`.

Step 3 - Locate the Installer Script

To run the installation program

1) Navigate to the location of the extracted installation files.
   At the command prompt, enter `cd tgcentral-xxx`.
2) Use the `sudo` (superuser do) command to run the `install.sh` file.
   At the command prompt, enter `sudo sh install.sh`.

   Note: On completion of the installation, you will receive a notification. The notification will display the URL from which you will need to complete the product configuration. You can also enter the URL manually into your browser (http://<ip address>:10000).

See also

- Linux Instructions
- TGCentral Configuration

Uninstall TGCentral from Linux Server

Use this task to uninstall TGCentral from a Linux Server.

To uninstall TGCentral

1) Navigate to the location on the server where the installation files are stored.
   At the command prompt, enter `cd tgcentral.xxx` (where xxx is the version number).
2) Use the `sudo` (superuser do) command to run the `uninstall.sh` file.
   At the command prompt, enter `sudo sh uninstall.sh`.

See also

- Linux Instructions
Upgrade TGCentral from Linux Server

Use this task to install the TGCentral on a Linux server. This task describes the following:
Follow the Linux installation instructions. The installer detects the previous version and proceeds to make the necessary updates.

See also
Linux Instructions
TGCentral Configuration

3.3. Central Configuration

Configure TGCentral

Use this task to configure TGCentral after installation on either a Windows or Linux server. The configuration process involves modifications to the agent (IBM i server) as well as to TGCentral (web interface).

Required Storage

Ensure the following minimum storage requirements are met:

- OS versions Ubuntu, CentOS, Windows Server2012 and above or Windows 10 Professional
- Storage 200GB space
- Memory 2GB memory
- Server Based Intel i5 or above

Required Programs (which are available from the Entitled Systems Support website http://www-304.ibm.com/servers/eserver/ess/index.wss)

- 5770SS1 Option 30 (Qshell)
- 5770SS1 Option 33 (PASE)
- 5733OPS (Open source for IBM i) Options *BASE
- 5733OPS (Open source for IBM i) Options 2
- 5733OPS (Open source for IBM i) Options 4
• 5770DG1 IBM HTTP Server for i
• 5733SC1 OpenSSH, OpenSSL,zLib Option 1

**Required PTFs** (which are available from the IBM Fix Central website [https://www-945.ibm.com/support/fixcentral](https://www-945.ibm.com/support/fixcentral))

• SF99225 (if on IBM i 7.3)
• SF99223 (if on IBM i 7.2)
• SF99123 (if on IBM i 7.1)

**TGCentral Installation**

Download and install all required licensed programs and PTFs prior to attempting the configuration.

**Note:** The only third-party components provided with the TG Product installation are the python modules, which require a licensed version of python.

**TGCentral Configuration**

**Step 1:** Access TGCentral IP address
**Step 2:** Link TGCentral to PostgreSQL Database
**Step 3:** Create TGCentral administrator login
**Step 4:** Set TGCentral website security parameters
**Step 5:** Review TGCentral configuration details

**Agent Configuration**

**Step 1:** Display agent details
**Step 2:** Set agent status to active
**Step 3:** Resolve agent pre-requisite issues
**Step 4:** Inform agent of TGCentral IP address

**Step 1: Access TGCentral IP Address**

Use this task to access TGCentral.

**Tip:** Use Chrome as your browser to configuration TGCentral.

**To access the TGCentral IP Address**

1) Launch Chrome.
2) Enter IP address at which TGCentral is installed in the address bar (e.g., `http://<ip address>:10000`).

**Step 2: Link TGCentral to PostgreSQL Database**

Use this task to link to the product database.

**Note:** To use the product, you must have an existing PostgreSQL database installed and running.

**To link to the PostgreSQL database**

1) Using the **Database** tab, enter the location of the PostgreSQL database.
Tip: If the database resides on the same host, enter localhost.

2) Enter new database password.
3) Confirm Database password.
4) Click Next.

Step 3: Create TGCentral Administrator Login

Use this task to create an admin login. The system automatically adds the admin (who has the highest level of permissions) as the first user. It is then the responsibility of the admin to add additional users as necessary.

To create an admin login
1) From the Configuration tab, complete the required fields.
   – Email
   – Username
   – Full name
   – Password
   – Confirm password
2) Click Next.

Step 4: Set TGCentral Security Parameters

Use this task to set ports and SSL (Secure Socket Layer) secure connection parameters.

To link to the PostgreSQL database
1) Using the Parameters tab, enter the appropriate ports and SSL certificate keys.
   Note: You can access the keys in the compressed installation file.
2) Click Next.

Step 5: Review TGCentral Configuration Details

Use this task to verify the configuration settings before launching the product.

To review the configuration settings
1) Using the Overview tab, review the configuration details.
   Tip: If you need to make modifications, click the Previous button.
2) Click Save Configuration.

Step 1: Display Agent Details

Use this task to display the status of the agent.

To display agent details
1) Sign into IBM i.
2) At the Selection or command prompt, enter TGMENU to access the TG Main menu.
3) At the Selection or command prompt, enter 10 (TGCentral Configuration).
Note: The TGCentral Configuration interface is displayed.

4) Review the agent installation and configuration details.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
</table>
| Agent Subsystem Status       | Status of the TGCentral communication subsystem TGCMN (in library TGPROD) necessary for TGCentral to communicate with the IBM i agent:  
*ACTIVE - Communication subsystem is active  
*INACTIVE - Communication subsystem is inactive |
| Pre-requisite Software Installed | Status of the pre-requisite software necessary for TGCentral to communicate with the IBM i agent:  
*NO - pre-requisite software not installed  
*YES - pre-requisite software installed |
| Pre-requisite modules Installed | Status of the pre-requisite modules necessary for TGCentral to communicate with the IBM i agent:  
*NO - pre-requisite modules not installed  
*YES - pre-requisite modules installed |
| TGCentral IP Address         | IP address of the TGCentral server communicating with the IBM i agent |
| TGCentral Server Name        | Name of the TGCentral server communicating with the IBM i agent |
| Communication Port           | Port used by the TGCentral server to communicate with the IBM i agent  
Tip: IBM i communication is performed via Port 7444. You can change the port if required.  
Uses port 80 (non-ssl) or 443 (SSL).  
This can be changes as well via the tgcentral.conf file. The configuration file is located at the installation root directory (the Windows default install path is c:/program files/tgcentral). |
| SSL Enabled                  | TRUE - SSL is enabled  
FALSE - SSL is disabled |
| Send Incoming Transactions   | Flag indicating whether TGSecure incoming transactions are sent to TG Central in real-time  
*YES - Enabled sending of incoming transaction  
*NO - Disable sending of incoming transactions  
Note: *NO is the default setting. |
| Send TGDetect Alerts         | Flag indicating whether TGDetests alerts are sent to TG Central in real-time  
*YES - Enabled sending of alerts  
*NO - Disable sending of incoming transactions  
Note: *NO is the default setting. |
| Log Status                   | Identifies the level of detail used to create the log:  
CRITICAL - Log only critical errs  
ERROR - Log all errors  
WARNING - log warning and errs |
<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFO</td>
<td>log info, warning, and errs</td>
</tr>
<tr>
<td>DEBUG</td>
<td>log everything (Note: This level of detail will take the most system resources to generate.)</td>
</tr>
<tr>
<td>Tip</td>
<td>The log file is stored at TrinityGuard/Agent directory.</td>
</tr>
</tbody>
</table>

**Step 2: Set Agent Status to Active**

Use this task to set the status of the agent to *ACTIVE. Only active agents are detected (seen) by TGCentral. An agent must be active for you to begin managing it using TGCentral.

**To set agent status to active:**

1) Access the TGCentral Configuration interface (option 10).
2) Update the Agent Configuration section with the TGCentral server data IP address.
3) Press the **F24** (Update Config) function key.
4) Press the **F22** (Start Agent) function key.

**Step 3: Resolve Agent Pre-requisite Issues**

Use this task to identify issues with pre-requisites (i.e., software and modules). This step is only necessary if pre-requisites are missing (Status = *NO*).

**To resolve agent pre-requisite Issues:**

1) Access the TGCentral Configuration interface.
2) Press the **F20** (Pre-requisite Status) function key.

**Note:** The TGCentral Pre-requisite Status interface is displayed.

3) Do the following as necessary for your specific installation case:

<table>
<thead>
<tr>
<th>If</th>
<th>Then</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your installation cannot locate the pre-requisite module(s)</td>
<td>Press the <strong>F20</strong> (Install Pre-requisite Modules) function key to attempt to locate the files</td>
</tr>
<tr>
<td>Your installation cannot locate the XML Service(s)</td>
<td>Press the <strong>F21</strong> (Install Pre-requisite Modules) function key to attempt to locate the files</td>
</tr>
<tr>
<td>Your installation cannot locate the pre-requisite software</td>
<td>Press the <strong>F22</strong> (Install Pre-requisite Software) function key to attempt to locate the files</td>
</tr>
</tbody>
</table>

4) Follow the instructions provided on each screen.
5) Ensure that the following license programs are installed via command **DSPSFWRSC**.
   - 5770SS1 Option 30 (Qshell)
   - 5770SS1 Option 33 (PASE)
   - 5733OPS (Open source for IBM i) Options *BASE
   - 5733OPS (Open source for IBM i) Options 2
   - 5733OPS (Open source for IBM i) Options 4
   - 5770DG1 IBM HTTP Server for i
   - 5733SC1 OpenSSH, OpenSSL, zLib Option 1

6) Ensure that the following group PTFs are installed via command WRKPTFGRP.
   - SF99225 (If on IBM i 7.3)
   - SF99223 (If on IBM i 7.2)
   - SF99123 (If on IBM i 7.1)

**Tip:** If the PTFs file are missing, download install them from the IBM Fix Central website [https://www-945.ibm.com/support/fixcentral](https://www-945.ibm.com/support/fixcentral).

Alternatively, the following PTFs are installed for license program 5733OPS via command DSPPTF.
   - SI59035
   - SI60567
   - SI60568

**Tip:** Download required PTFs via IBM Fix Central website [https://www-945.ibm.com/support/fixcentral](https://www-945.ibm.com/support/fixcentral).

**Step 4: Inform Agent of TGCentral IP Address**

Use this task inform the Agent of the TGCentral IP address. Once you established this connection, the agent can begin communicating with TGCentral.

**To enter the TGCentral IP Address:**

1) Access the TGCentral Configuration interface.
2) In the TGCentral IP Address field, enter the IP address at which TGCentral Web interface is currently installed.

Use this task to identify issues with pre-requisites (i.e., software and modules). This step is only necessary if pre-requisites are missing (Status = *NO.*).

See also
- [Windows OS Requirements](#)
- [Linux OS Requirements](#)
4. Appendix

4.1. Libraries and Commands

The following libraries are installed:

- TGPROD
- TGDATA
- TGINSTALL
- TGBACKUP - Created at time of upgrade

The commands are installed in the QGPL library:

- TGMENU – TGAudit Main Menu
- TGRPT – Run a Report
- TGCARD – Run Report Card
- TGWRKRPT – Work with Reports
- TGWRKCARD – Work with Report Cards
- TGLICSTS – Work with Licensing Status