Troubleshoot

This chapter includes information about scenarios that could affect the performance of the program. Additional topics will be added to the chapter as areas are identified where documentation can assist in troubleshooting.

Lost Connection to Web Service

If the Blackbaud NetCommunity Web server loses its connection to the Web Service server, Blackbaud NetCommunity is not able to communicate with The Raiser's Edge. This means your website cannot access existing data or send new data to the program. If this happens, some parts, such as Formatted Text and Images parts, are not affected by the lost connection. However, the lost connection impacts some of the parts on your website and can partially or completely disrupt these parts until you restore the connection to the Web Service server.

The following definitions describe the user roles that may be affected when the Blackbaud NetCommunity Web server is not connected to the Web Service server.

Blackbaud NetCommunity User

This refers to a user who belongs in a role in Blackbaud NetCommunity but is not linked to a query in The Raiser's Edge.

Blackbaud NetCommunity Role

This refers to a role in Blackbaud NetCommunity that is not linked to a query in The Raiser's Edge.

Provisional User

This refers to a user who has registered on the website but has not yet been processed in The Raiser's Edge.

Supervisor User

This refers to a user who has supervisor access to the website, as set up in *Administration*.

The following table describes the impact on several parts when the Blackbaud NetCommunity Web server is not connected to the Web Service server.

Blackbaud NetCommunity feature	Behavior when web service is offline
Documents	Anonymous users are able to view documents. Provisional and Blackbaud NetCommunity users are able to view and interact with documents.
Donation Form	You can accept donations from anonymous users, provisional users, and Blackbaud NetCommunity role users. **Note:** When you place a Donation Form part in Test Mode, the part behaves as if you have a connection to the Web Service server even if this is not the case. Test Mode allows you to design, style, and test a donation form part without creating transactions, generating emails, or communicating with Blackbaud Services or The Raiser's Edge. In Test Mode, you can submit a donation and receive a confirmation, but no transaction is created.
Emails (acknowledgements)	You can send acknowledgements to provisional and Blackbaud NetCommunity users. You cannot send messages and newsletters from within the Administrative system.
Event Calendar	All users can view the event calendar. On the part options, you set up role rights to add and edit calendar items.
Event Registration Form	You cannot accept event registrations. A 404 Error is reported. **Note:** A 404 Error is also reported when an Event Registration Form part is in Test Mode.
Membership Form	You can accept membership transactions from anonymous users, provisional users, and Blackbaud NetCommunity role users.
News Reader	Anonymous users, provisional users, and Blackbaud NetCommunity role users can view news reader content.
Payment 2.0	You can accept payment transactions from anonymous users, provisional users, and Blackbaud NetCommunity role users.
Poll	Anonymous users, provisional users, and Blackbaud NetCommunity users can view and interact with the poll.
Quick Search and Site Search	The search tool works, but results are restricted to anonymous user rights or provisional user rights.
Reports (web traffic and email)	Anonymous users, provisional users, and Blackbaud NetCommunity users can view and interact with reports.

Blackbaud NetCommunity feature	Behavior when web service is offline
Survey	Anonymous users, provisional users, and Blackbaud NetCommunity users can view and interact with the survey.
Team Fundraiser (with events enabled)	You cannot accept event registrations. A 404 Error is reported for events.
User Login Form	Registered Blackbaud NetCommunity users are unable to log in to the website if they are linked to constituent records in The Raiser's Edge. They receive the error message "Unable to log in at this time." Provisional users and supervisor users are able to log in. Anonymous website users can register and log in as provisional users until they are processed in The Raiser's Edge.
User Profile Form, Giving History, and User Interests	Users cannot access or edit these areas because they only support registered Blackbaud NetCommunity users who are linked to constituent records in The Raiser's Edge. When a user tries to access these parts, the User Login part appears.
Weblog	If the part settings allow for it, anonymous users can view the weblog, and provisional users and Blackbaud NetCommunity users can view and interact with the weblog.

Test Environment Considerations

A test environment may be necessary for your organization to evaluate the impact of a new release, patch, or new functionality against current business practices before going "live". To properly prepare for this endeavor, it is important to plan appropriately.

Review the following questions as an organization before you move forward with a test environment.

Why

What does your organization want to achieve with the test environment?

For example, do you want to evaluate new functionality, review setup or upgrade procedures, or confirm changes to business processes?

Who

Do you have the right technical staff to implement the applications and support the organization through this process? Are they familiar with the software, environment (systems), and installation procedures?

☐ Consider all integrated Blackbaud applications and any third-party applications that your organization uses.

□ Before implementation, review the program's New Features Guide to become familiar with the new functionality you will implement.

Where

Are the appropriate systems available, and do you have access within those systems to set up, configure, and connect to required systems as defined in the Blackbaud NetCommunity System Requirements and Blackbaud NetCommunity Configuration Overview documents?

□ We recommend you review your current configuration to determine where the test environment will fit and whether it needs to be on a separate system.

□ Review the Blackbaud NetCommunity Configuration Overview to evaluate the scenarios to set up if the entire test environment is "on premise."

- Please consult Blackbaud Services if you require a test environment in our Blackbaud Application Hosting environment.

- The Configuration Overview provides recommendations for server and network configurations in a live environment. If it fits within your organization's goals for the test environment, it is reasonable to apply a more consolidated approach to the test environment and have Blackbaud NetCommunity components on the same system.

Warning: Do not set up a test environment web server or web service server on the same system as your live web server or web service server.

How

Have you reviewed the following important information to make sure the test environment implementation is successful?

- For each version of a Blackbaud product that you plan to implement in your test environment, make sure you review the product's system requirements document and installation guide. For example, if only SQL Server 2005 is supported on a new version but you have SQL Server 2000, you must prepare a SQL Server 2005 system.

- Do not set up a test environment web server or web service server on the same system as your live web server or web service server.

- To use your current Blackbaud data in the test environment, back up each program's database and restore it to a new named database. When you install the test systems, point the programs to these copies of the databases.

- After you set up a Blackbaud NetCommunity test environment, change the plug-in options to point to the test plug-in service. If you do not, you will download transactions from your live environment.

- Blackbaud Services: When you back up your production environment's database and restore it in a test environment, the production environment's configuration is used by the test environment if you do not update it. For example, you can inadvertently charge credit cards and send unwanted or duplicate emails if you do not update the environment's configuration. Refer to Knowledgebase for more information.

> *Note:* Your System Administrator can use the BlockAllEmails and BlockScheduledEmails settings to prevent inadvertently sending email messages and scheduled email from a test environment. To do this, you must add <add key="BlockAllEmails" value="True" /> and <add key="BlockScheduledEmails" value="True" /> to the appSetting node in the web.config file. By default these settings do not appear in the file, and the default behavior is False.

- Within the system itself, the test environment does not support porting or migrating changes from the test environment to the live environment.

Support

What is and is not supported by Blackbaud NetCommunity Support?

- We do not support test environments that an organization creates or manages on their own. However, we do support test environments when the organization engages Blackbaud Services to build them.
- We do not support issues caused by customizations not developed by or installed by Blackbaud Services.
- We do not support performance issues encountered or caused by a test environment, whether installed by Blackbaud Services or not. If there is a strong case that the performance issues exist in a "live" environment, Blackbaud NetCommunity Support can review the problem.

Tip: Support resources are available from Blackbaud's website.

Troubleshoot Connection Issues

1. Check the testconfig page at www.MyDomain.com/testconfig.aspx where www.MyDomain is the full domain of the Blackbaud NetCommunity website installation.
   - If errors are present on the testconfig page, search Knowledgebase for those specific errors.
2. Verify that you can log into The Raiser's Edge directly on The Raiser's Edge Web Service server.
   - If you cannot,you must resolve the issue before you continue to troubleshoot. Search Knowledgebase for the specific error returned.
3. From the Blackbaud NetCommunity plug-in in The Raiser's Edge, click **Options**. Next, click **Test Connection** to test the plug-in URL.
   - If the link does not return "responded successfully," check the plug-in URL.
4. Test whether you can browse successfully to the plug-in URL.
   - If successful, a white page with plain text links appears.
   - If you are unable to browse to the URL and your Blackbaud NetCommunity site is hosted by Blackbaud, visit Blackbaud's website to contact Support.
   - If your site is not hosted by Blackbaud, access the URL from The Raiser's Edge Web Service server.
5. Test whether a firewall is blocking traffic to or from either server.

- Temporarily disable the client-side firewall
- Use a tool like Microsoft's PortQueryUI to verify ports 80 and 443 are not filtered.
- If either port is filtered, disable the firewall and check the connectivity again.
- To use IP filtering, refer to Knowledgebase for a list of IP addresses to unblock.

  If Blackbaud does not host your Blackbaud NetCommunity installation:

  Contact your hosting provider or IT professional to determine the IP addresses to configure for your setup.

  If Blackbaud hosts both your Blackbaud NetCommunity and installation of The Raiser's Edge:

  No action is necessary.

  If Blackbaud hosts your Blackbaud NetCommunity installation, and you host The Raiser's Edge web services server:

  The IP addresses you need to open vary by data center:

  Boston:

  205.139.103.1

  Orange County:

  209.67.132.1

  Vancouver:

  204.92.98.65 – 252 (This range of addresses must be open)

  Sydney:

  61.14.116.96

6. Verify that The Raiser's Edge service and custom service URLs in Blackbaud NetCommunity are correct.
   - Access the setting in Blackbaud NetCommunity from *Administration, Sites & settings, Web services*.
   - Attempt to browse to the URLs to test them.
   - If successful, each URL loads a white page with plain text links in the browser. The Raiser's Edge service URL format is generally http://[REServerURL]/RE7Service/MasterService.asmx. The custom service URL format is generally http:// [REServerURL]/RE7Service/CustomService.asmx

7. Verify you are able to accessThe Raiser's Edge Web Service server from the Blackbaud NetCommunity server and vice versa.
   - From The Raiser's Edge Web Service server, browse to http:// [BBNCWebsiteURL]/testconfig.aspx
   - From the Blackbaud NetCommunity web server, browse to http:// [REServerURL]/RE7Service/MasterService.asmx

- If Blackbaud hosts the website, create a case on Case Central to test access from the Blackbaud NetCommunity web server.

8. Verify the domain name of The Raiser's Edge Web Service server resolves correctly.

    - Enter the following from a command prompt, where rews.domain.com is the URL of The Raiser's Edge Web Service server: **nslookup** rews.domain.com

    - The prompt should return the IP address of The Raiser's Edge Web Service server.

9. Verify The Raiser's Edge Web Service server communicates properly with The Raiser's Edge database SQL server.

    - From The Raiser's Edge web service server, run the following from a command prompt where [dbservername] is the name of the RE database server: **ping** [dbservername] **-t**

    - Verify that the response times remain below 5 minutes. If they are above this time, contact a network administrator for assistance.

10. Verify The Raiser's Edge and custom service usernames and passwords are correct.

    - These credentials are saved in the: Blackbaud NetCommunity website under *Administration, Sites & settings, Settings, Web services*. You can also verify them from /Blackbaud/Raisers Edge Web Service/web.config file on The Raiser's Edge Web Service server. If your site is hosted by Blackbaud, the credentials are not available for you to edit because you do not have access the web config file.

        Note: In the web.config file, look for a line like <add key="RE7ServiceUsers" value="username\password" />

    - The credentials must be the same in both locations.

11. Verify there are no performance issues on The Raiser's Edge Web Service server. For information about performance issues, see Knowledgebase.

12. Reboot The Raiser's Edge Web Service server:

    - Before you reboot the server, check if any users are currently logged into the database. If users are still logged in, have them exit and sign out of the program. For information about how to check if users are logged in, see this Knowledgebase article. For information about how users can exit and sign out of the program, see this Knowledgebase article.

    - If the server is a web server, consider rebooting at a time whenfew or no users are accessing the website. It is considered good practice to provide warnings of upcoming outages on the affected website pages or other pages that link to the server's website.

    - If there are other applications running on the server, or other databases using the same SQL server instance, ask all users to exit those applications as well.

Note: If the SQL server database service is set to automatic, you do not need to disable it because it shuts down and restarts with the server.

> **To change the SQL server database service to automatic:**

1. Click **Start**, **Run** from the task bar on your desktop.
2. Enter services.msc.

3. Browse to the SQL server.

4. Right-click **SQL Server** and select **Properties**.

5. For the **Startup type**, select **Automatic**.

> **To reboot The Raiser's Edge Web Service server**

1. Close all programs.

2. Click **Start**, **Shut Down** from the task bar on your desktop.

3. Select **Restart**.

4. Click **OK**.

Common Errors on The Raiser's Edge Web Server

ERROR: The underlying connection was closed: Could not establish trust relationship for the SSL/TLS secure channel.

Where: This occurs when you click **Test Connection** in the Blackbaud NetCommunity plug-in options or on the Testconfig page.

Why:

- In Plugin: The NetCommunity website is still connecting with the IP address. The plugin URL in the Blackbaud NetCommunity plug-in option is set to the domain the website will use when it goes live.

- On Testconfig: The security certificate is expired or the A record for the RE7Service is pointing to the incorrect IP address.

Fix:

□ In Plugin: Change the plugin URL to the IP address. For example: http://XXX.XXX.XXX.XXX/pluginservice/masterservice.asmx

□ On Testconfig: Update the security certificate or contact the site's internet service provider to point the domain's A record to the NetCommunity web server IP address.

ERROR: System.Net.WebException: The operation has timed out

Where: This error appears on the RE7 Web Service server Ping level when you view Testconfig.

Why: The Raiser's Edge Web Service server is down, a firewall or proxy is blocking the connection between the Blackbaud NetCommunity web server and The Raiser's Edge web service server and/or Internet Information Services (IIS) is not functioning properly on The Raiser's Edge Web Service server.

Fix:

□ Verify The Raiser's Edge web service is installed on the server referenced in the URL.

□ Verify the IIS Admin and World Wide Web Publishing Services are running on The Raiser's Edge Web Service server.

- Copy the URL from the error and paste it into a browser. If you receive a Server Error In RE7Service Application error, search Knowledgebase and use the text of the error.

- From the Blackbaud NetCommunity web server, copy the URL from the error and paste it into a browser. Do the same on The Raiser's Edge Web Service server. If the page loads on The Raiser's EdgeWeb Service server but not on the Blackbaud NetCommunityweb server, contact a qualified network administrator for troubleshooting the connection. TCP Ports 80 and 443 should be open on any firewall between the two servers.

ERROR: System.Web.Services.Protocols.SoapException: Server was unable to process request.

Where: Testconfig fails on RE7 WS Authenticate.

Why: The username or password on The Raiser's Edgeweb service web.config file is incorrect.

Fix:

- Verify that the username and password from The Raiser's Edge under *AdministrationConfiguration* is listed in The Raiser's Edgeweb service web.config file under the RE7ServiceUsers key.

- Ensure that the local_request_only key in The Raiser's Edge web service web.config file is set to False.

ERROR: System.Web.Services.Protocols.SoapException: System.Web.Services.Protocols.SoapException: Server was unable to process request. ---> System.Security.SecurityException: Permission denied at Blackbaud.RE7Service.MasterService.HandleRequest(Object oRequest, IRequestHandler oHandler, Boolean bUsesQuex) at Blackbaud.RE7Service.MasterService.InstalledCountry()

Where: When you access the Blackbaud NetCommunity website.

Why: Connectivity is lost toThe Raiser's EdgeWeb Service server, NTFS permissions is invalid, Blackbaud NetCommunity is connected to an incorrect database, Microsoft.NET is corrupted, or The Raiser's Edgeinstallation is corrupted.

Fix:

- Attempt to log into The Raiser's Edge onThe Raiser's Edge Web Service server and troubleshoot any issues withThe Raiser's Edge connectivity.

- Verify the network service account has the appropriate NTFS permissions.

- Run Process Monitor on The Raiser's Edge Web Service server while you attempt to run testconfig. Search for access denied errors in the ProcessMon logs and correct the permissions as needed.

Note: Process Monitor is a third party service we provide to help you resolve your issue. However, Blackbaud is not responsible for the information on third-party websites, and we cannot assist you when you implement their solutions. For information about use and install Process Monitor, see Knowledgebase.

- Ensure Blackbaud NetCommunity connects to the correct database for The Raiser's Edge:
  1. Check The Raiser's Edge database number specified in *Administration*, *Configuration*.
  2. Log into The Raiser's Edge on the web server.
  3. Edit the registry.
  4. Check the HKLM\Software\ODBC\ODBC.INI registry keys.
  5. Verify that the DSN set in *Configuration* matches the DSN of the corresponding database.

□   Run RERegister on The Raiser's Edge Web Service server.

□   Repair The Raiser's Edge on The Raiser's Edge Web Service server.

□   Repair Microsoft .Net 2.0 on The Raiser's EdgeWeb Service server.

ERROR: System.Net.WebException: The request failed with HTTP status 408: Request Timeout.

Where: When you access the Blackbaud NetCommunity website.

Why: The Blackbaud NetCommunity URL is incorrect, the MasterService URL is inaccessible, or the DNS is not set up properly.

Fix:

1. Verify the correct Blackbaud NetCommunity site URL is listed in *Administration*, *Configuration* in The Raiser's Edge.

2. Verify you are able to access the MasterService URL in an internet browser.

3. Verify that DNS is configured to map the Blackbaud NetCommunity site domain name to the appropriate IP address.