MC Agent Troubleshooting

The MC Agent is the process used by Maintenance Connection to manage a number of automated features in the system.   The MC Agent, when installed, runs continuously checking for "jobs" that need to be executed, based on a defined "date/time" or occurrence of a specified "event."

The MC Agent provides automation support for the following features:

➢ **Notification Emails Defined in the Rules Manager**
➢ **Scheduled Reports Sent via Email**
➢ **Scheduled Reports Saved to a File**
➢ **Work Order Rapid Entry**
➢ **Database Job Scheduler**
➢ **Email to Work Order Manager**

It should be noted that there are numerous other automated processes in Maintenance Connection that do not utilize or require the MC Agent. If you are having difficulties with the following features, contact Maintenance Connection Support for the appropriate troubleshooting guide.

• SMTP Troubleshooting Guide: Invoked Emails through Email Button and First Time Login Emails
• PM Troubleshooting Guide: Generation of Preventive Maintenance Work Orders

This document is intended to assist IT Staff at customers with **onsite installations** of Maintenance Connection when troubleshooting issues with the MC Agent.

The majority of issues reported with MC Agent features relate to difficulties with email receipt.   These issues primarily result from recipient email systems blocking receipt of the email or errors in specified addresses or settings within Maintenance Connection. To minimize email receipt issues, it is recommended that you "whitelist" the "@maintenanceconnection.com" domain. For additional assistance troubleshooting email issues, refer to the   MC Email Troubleshooting Guide.

Refer to the following sections to troubleshoot problems with the MC Agent:

• Verify the MC Agent Service is Running and DB Connections Working
• Verify MC Agent SMTP Email Settings
• Broadcast Events to Monitor Agent
• Check Email Log Files
• If Agent Suddenly Stops Working

Verify the MC Agent is Installed and Running

The MC Agent is an optional feature of Maintenance Connection.   If the features of the MC Agent have never worked in your organization, you should first verify that the agent was purchased and is properly installed.

➢ Locate the service in the Programs Folder on your web server:
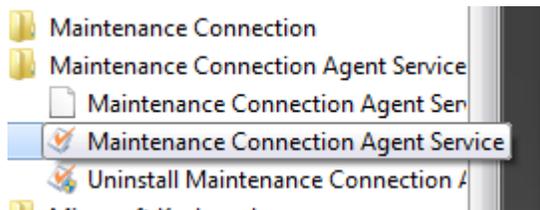
Note: An MC Agent Setup Icon may also have been placed on the server desktop during installation.

The **MC Agent Service Dialog** should display, defaulted to the Event Log Tab.   Click on the **Status Tab** at the top of the dialog. If the MC Agent Service was installed successfully, options (buttons) on the right will display to "Uninstall" and "Stop (or Start) Service" as shown in the following example.
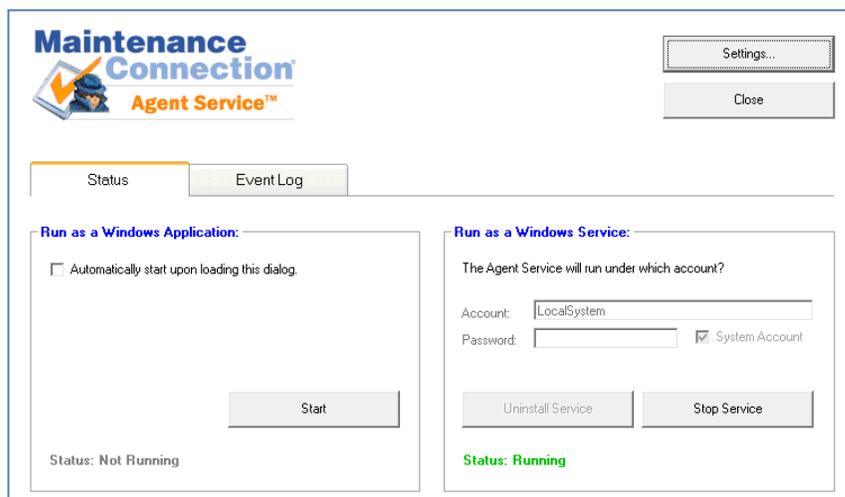
 If the agent has not been installed, a button to "**Install Service**" will be displayed (instead of "Uninstall").   If the button indicates "**Install Service**", contact Maintenance Connection Support for assistance in correctly installing the agent.

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## Verify the MC Agent Service is Running and DB Connections Working

If no MC Agent functions are working and you wish to verify that the agent is running.

- Click on the Status Tab at the top of the MC Agent dialog and verify that the section on the right labeled "Run as a Windows Service" has a green message that indicates: Status: Running.
- If the service is not running, the lower right of the dialog will appear as follows:


To start the service, click the "**Start Service**" Button.   If the service does not start from this selection (nothing happens), you may need to start the service from Windows Services. To start from Windows Services:

➤ Open Windows Services (Control Panel->Administrative Tools->Services).
➤ Scroll to "**Maintenance Connection Agent Service**".
➤ Select this service and click the "**Start**" option on the left:
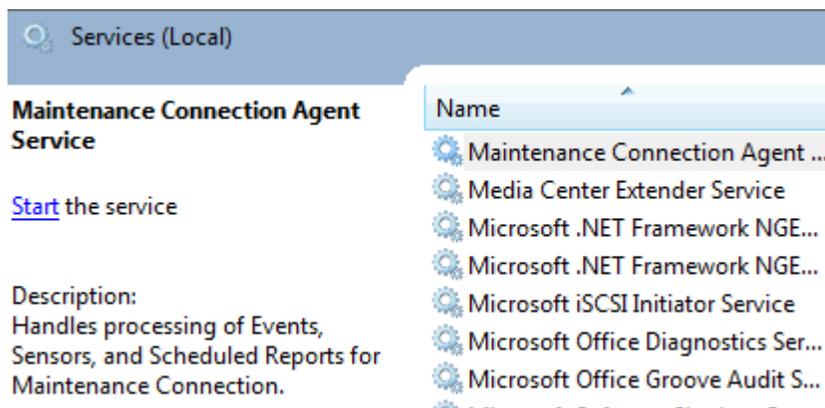
➤ Once the service is running, options will display to Stop and Restart the service:
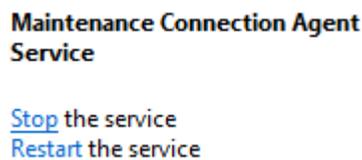
> *Note: If changes have been made to your server environment, you may wish to "**Stop**" and then "**Restart**" the service.*
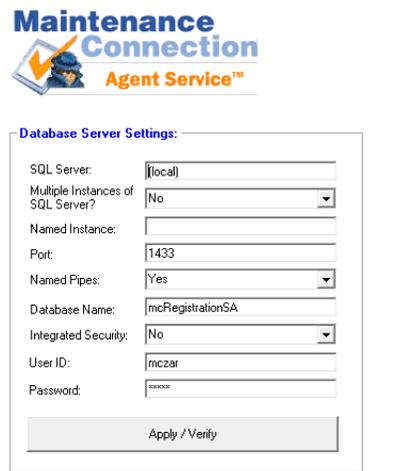
Verify Database Connections

Once you have verified that the service is running, check to ensure the Database Connections are working:

➢ Click the **Settings** Button in the upper right of the MC Agent Setup dialog:

➢ The Settings Dialog will come forward.
➢ Click the **Apply/Verify** Button in the Database Server Settings Section on the left side of the dialog:

➢ If the agent service can connect to the database, a message similar to the following will display:
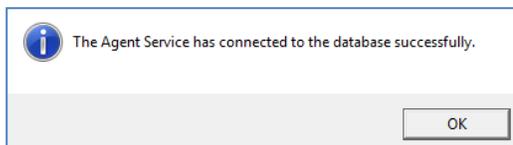
If a message to the contrary appears, contact Maintenance Connection Support.

Verify MC Agent SMTP Email Settings

If no emails are being received (not just for particular recipients), you should check the Email Settings in the MC Agent Service:

➢ Click the **Settings** Button at the top of the MC Agent Setup dialog:
➢ The MC Agent Settings Dialog will display.

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➢ Verify that the SMTP Server Settings are accurate for your email server. On some systems, it is important to have a valid User Name/Password specified.
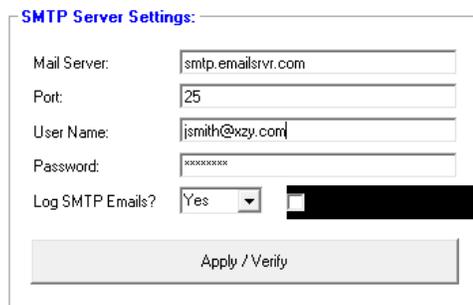
SMTP Server Settings:

|	
Mail Server:	smtp.emailsrvr.com
Port:	25
User Name:	jsmith@xzy.com
Password:	*********
Log SMTP Emails?	Yes ▼

Apply / Verify

➢ Click the **Apply/Verify** Button to send a test email. You will be prompted to specify an email address to use for a test email.

Please enter an Email address below to test the SMTP Server

Email Address: |

Send

Cancel

➢ Enter a valid email address and click **Send**.
➢ If the email is sent successfully, a confirming message will appear:
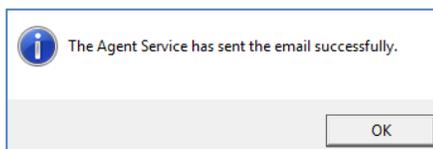
ⓘ The Agent Service has sent the email successfully.

OK

> *Note: If an error message appears, recheck your SMTP settings or contact Maintenance Connection Support.*

➢ Verify that the message was received by the listed recipient. If the test message was sent successfully, but not received by the recipient, this is an indication that emails are being blocked or interpreted as spam. That is, the email was successfully processed through Maintenance Connection, but later blocked by an email system.

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Broadcast Events to Monitor Agent

An option in the MC Agent Tool allows you to monitor events and errors occurring with the agent.

> *Note: Since this option involves broadcasting UDP messages across your network, you may wish to turn the setting off after testing. If this option does not work in your environment - proceed to the section on Check Log Files for further troubleshooting.*

To monitor agent events:

➢ Click the **Event Log Tab** at the top of the MC Agent Setup dialog:
➢ Click the Broadcast Events Indicator at the bottom of the dialog.
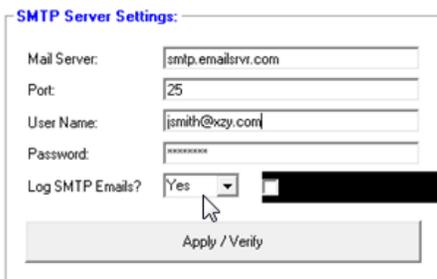
☑ Broadcast Agent Events

➢ In a minute or so, events should display in the dialog, providing hints as to problems that may be occurring. Watch for messages regarding sent emails or connection failures.
➢ If no information of assistance is provided, proceed to check the email logs as defined below.

Check Log Files

Once you have verified that the SMTP Email Settings are correctly set, you can check the log files to further troubleshoot:

➢ First, verify that the MC Agent Setup Dialog is set to "Log SMTP Emails" by opening the MC Agent Setup Tool and clicking the **Settings** Button at the top of the MC Agent Setup dialog.

- Ensure the "Log SMTP Emails?" indicator is set to "Yes"

SMTP Server Settings:

Mail Server:	smtp.emailsrvr.com
Port:	25
User Name:	jsmith@xzy.com
Password:	********
Log SMTP Emails?	Yes

Apply / Verify

➢ Then check the Log Files for recent emails:

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- First, check the records in the Notification Rules Log File (**MCAutoEmail -** includes all notification emails sent from Rules Manager):
- Open the SQL Administrator Tool (**Applications->SQL Administrator**)
- Select the **Query Analyzer** option on the left and enter:

  SELECT TOP 25 * FROM MCAutoEmail ORDER BY MCAutoEmailPK DESC

- Check the values in the Processed Field.

  - A value of "C" (complete) indicates that the email was processed and sent to the recipient. That is, the email was processed successfully through Maintenance Connection, but later blocked by a recipient email server.
  - A value of "P" (processing) indicates that the record is still waiting to process (was not able to process).   This value is indicative of a problem with SMTP or mail server settings, as the agent attempted to communicate with the SMTP server but did not receive a successful response.
  - A value of "N" (needs to be processed) indicates that the notification has not begun to process. This could indicate that the agent is not running or properly installed.

- You can also check the Email Log File (**MCEmailLog**) to obtain additional information about errors encountered when attempting to generate an email. The file includes all email transactions that the agent has attempted (scheduled reports and notifications from rules manager). Email logging must be turned on in the MC Agent Service in order to have records saved into the log file.

  - From the Query Analyzer, enter:

    SELECT TOP 25 * FROM MCEmailLog ORDER BY EmailLogPK DESC

  - Check the value in the "Success" bit field (one of last columns) to determine if the email succeeded.
  - If the email did not succeed (0), the ERROR column to the right of the "Success" column may provide a useful description of the failure for debugging purposes.

If the troubleshooting steps defined have not provided you with enough information to address the issue, contact Maintenance Connection Support for assistance.

Items to Check if Agent Suddenly Stops Working *(used to work, but is no longer working)*

If features that previously worked with the MC Agent are no longer working, verify that there have not been changes to your server or desktop environment (e.g., Maintenance Connection Databases moved or upgraded, new security protocols or anti-viral processes added).

If there has been a server reboot, the service may simply need to be restarted (or possibly stopped and restarted).

If further assistance is needed, contact Customer Support.

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