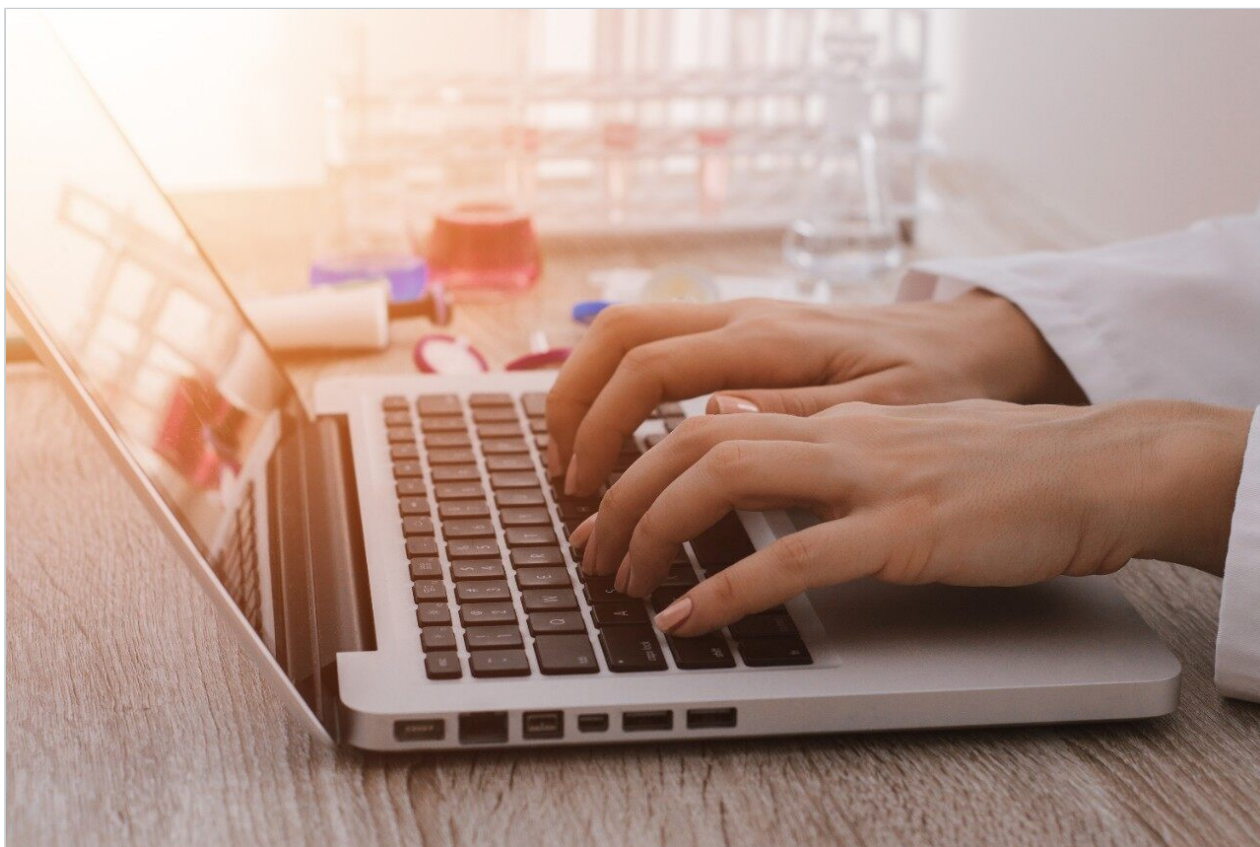


## Remote Monitoring of MassLynx Systems

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### Abstract

With the Remote Status Monitor (RSM) component of MassLynx Software, system monitoring can be enabled and the information accessed through a web browser. This functionality is available to any

instruments running under MassLynx control.

## Benefits

Remote monitoring of instrumentation and queues can increase throughput and system uptime. Users will know when their samples are completed and which instruments have the shortest wait time, while administrators oversee system status and solvent levels.

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## Introduction

Instrument systems are frequently located in areas that are not convenient for users or system administrators, making the checking of system and queue status cumbersome. With the Remote Status Monitor (RSM) component of MassLynx Software, system monitoring can be enabled and the information accessed through a web browser. This functionality is available to any instruments running under MassLynx control.

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## Results and Discussion

Running on a centralized PC, RSM monitors the status of one or more Acquisition PCs and writes that information to an XML file. The information can then be read and interrogated in a browser. This website can be viewed from any computer within a company's firewall.

Setting up RSM is as simple as turning on MassLynx Status in MassLynx and registering the instrument with the software. RSM reads a text file generated by MassLynx to determine the state of the instrumentation and the queue information. Only one instance of RSM is needed to monitor all the instruments in your lab. To register instruments, you only need to browse to the location of the text file for each instrument (Figure 1).

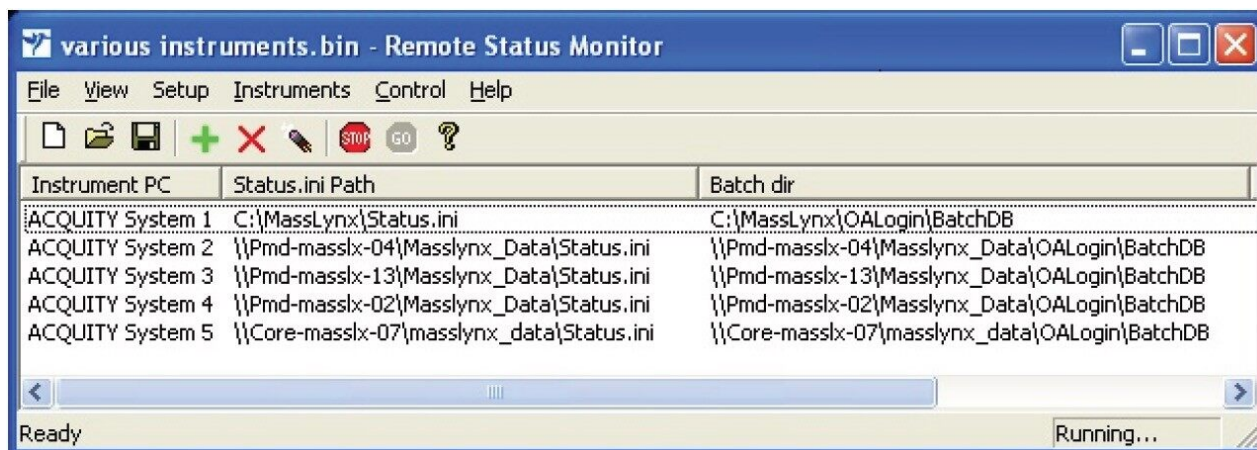


Figure 1. Remote Status Monitor setup.

Solvent monitoring is enabled through MassLynx. Once it is set up, Solvent Monitoring will estimate how much solvent is remaining in your solvent containers and how much is in your waste containers. It can be configured to send emails when solvent levels reach predetermined levels.

RSM reads the status.ini files of all the connected instruments and generates a summary page. The Status Summary page (Figure 2) opens in the browser and contains a list of systems and the number of samples in their queues, in a table. The color codes are listed below:

Red = The instrument is inactive.

Green = The instrument is active.

Yellow = The instrument is offline.

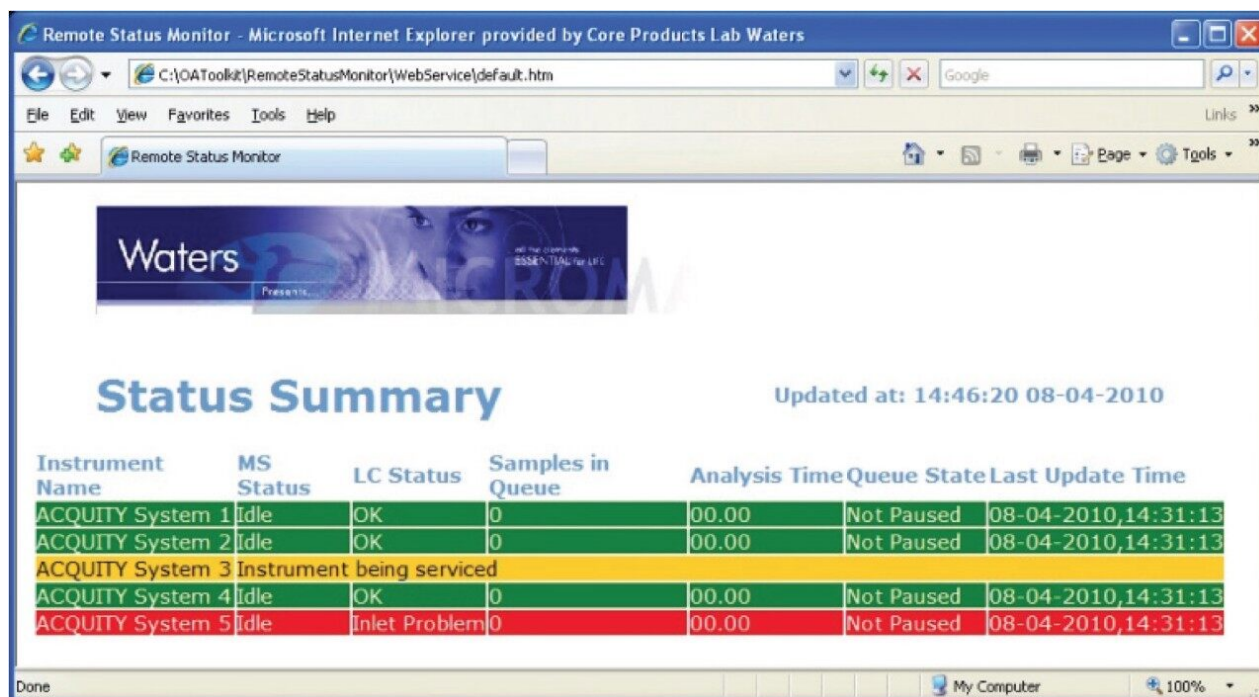


Figure 2. Remote Status Monitor summary web page.

More detailed information about an instrument can be displayed by clicking anywhere in the instrument row. An instrument detail page opens (Figure 3). Clicking Summary Page at the top-right corner of the page returns the user to the Status Summary.

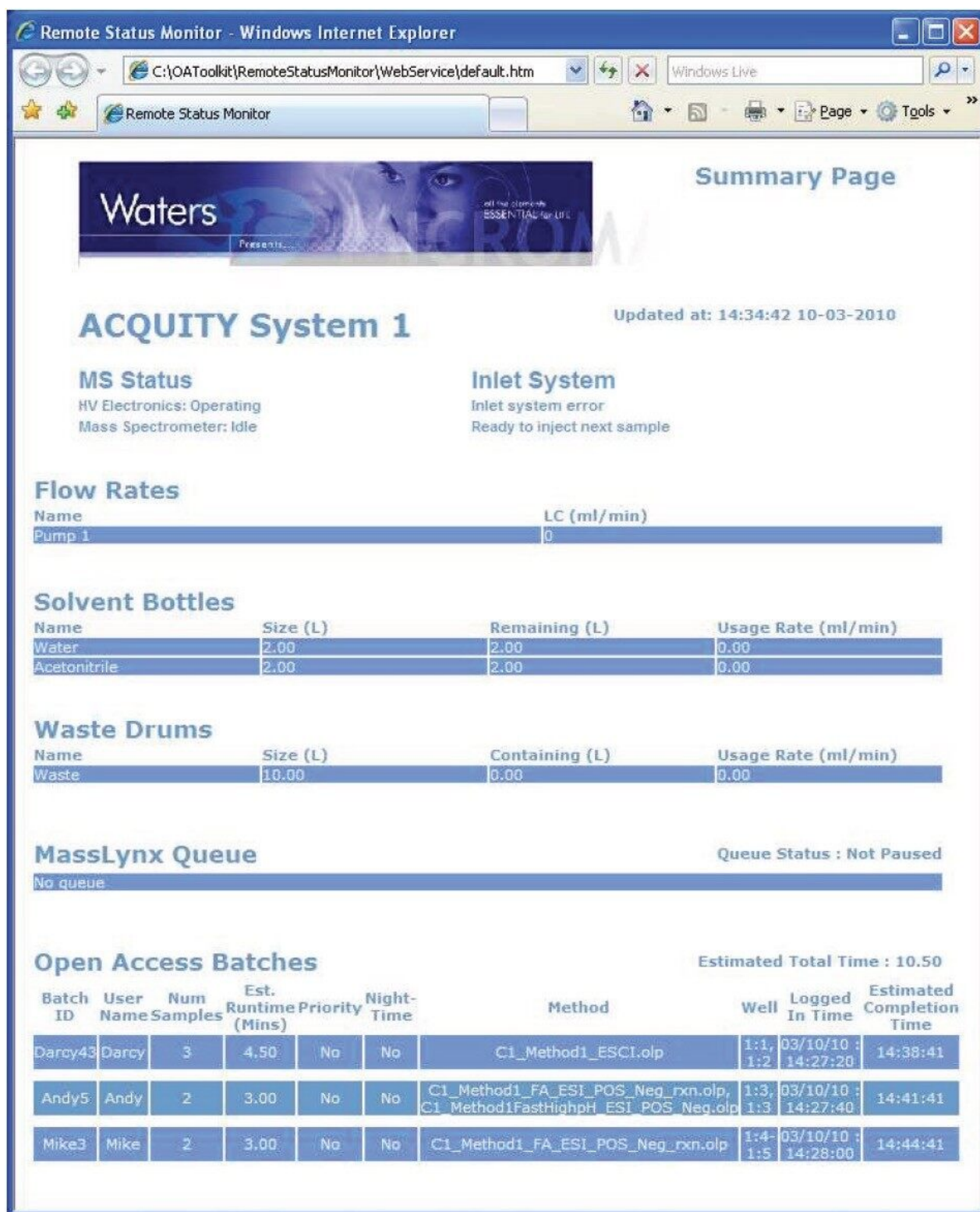


Figure 3. Instrument Status web page in Remote Status Monitoring.

The instrument-detail page contains relevant information about the instrument's status, flow rates, solvent



and waste levels, and queue information. Samples logged in through the MassLynx sample list contain a minimal amount of data whilst those logged in through the open access software OALogin contain more detail, including usernames, number of samples and locations, method name, and estimated time of completion.

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## Conclusion

RSM monitors the status of one or more instrument systems and writes that monitoring information to a website. The information can then be read and interrogated in a browser. When users are ready to log in their samples, they can use Status Monitor to see the queues already running on that instrument and the approximate wait times. Solvent levels can also be monitored by the system administrator using Solvent Monitoring software and RSM.

Whether a lab is running samples through the MassLynx sample list or in an open access mode using OALogin, remote monitoring of the instrumentation and queues can increase throughput and system uptime. Users will know when their samples are completed and which instruments have the shortest wait time, while administrators can keep an eye on the system status and solvent levels. The administrator can quickly see when a system requires attention and take appropriate action without having to wait for someone to inform him of the issue. Likewise, solvent and waste levels can be monitored to ensure they are at appropriate levels.

RSM is available as part of the OpenLynx Open Access Application Manager and its OALogin suite of products.

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