

White Paper

Fabasoft Folio Services Monitoring

Fabasoft Folio 2019

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1 Introduction

This document describes several possibilities to monitor Fabasoft Folio Services, which can be used to ensure the high availability of these services.

2 Software Requirements

System environment: All information contained in this document implicitly assumes a Microsoft Windows environment or a Linux environment.

Supported platforms: For detailed information on supported operating systems and software see the software product information on the Fabasoft distribution media.

3 Fabasoft Folio HTTP Probe

Fabasoft Folio HTTP Probe allows checking the functionality of Fabasoft Folio Web Services. This method is superior to a simple “ping” or a test whether Microsoft Internet Information Services or Apache web services are available. HTTP Probe analyses if a Fabasoft Folio Web Service actually is effectively able to process requests.

This is essential to guarantee high availability. A load balancer permanently has to monitor all Fabasoft Folio Web Services. Error policies are getting active if one of the Fabasoft Folio Web Services in a web server farm sends no – or an invalid – answer to the Fabasoft Folio HTTP Probe request. The error policies specify what happens to active connections on the failing Fabasoft Folio Web Service. If a Fabasoft Folio Web Service fails, the requests have to be distributed across the other Fabasoft Folio Web Services. New requests must not be allocated to the failing Fabasoft Folio Web Service. If the Fabasoft Folio Web Service is available again, it should automatically get new requests.

Usage:

```
http://<web server>/<virtual
directory>/fscasp/content/bin/fscvext.dll?h&stallmsecsmax=<msecs>
```

Example:

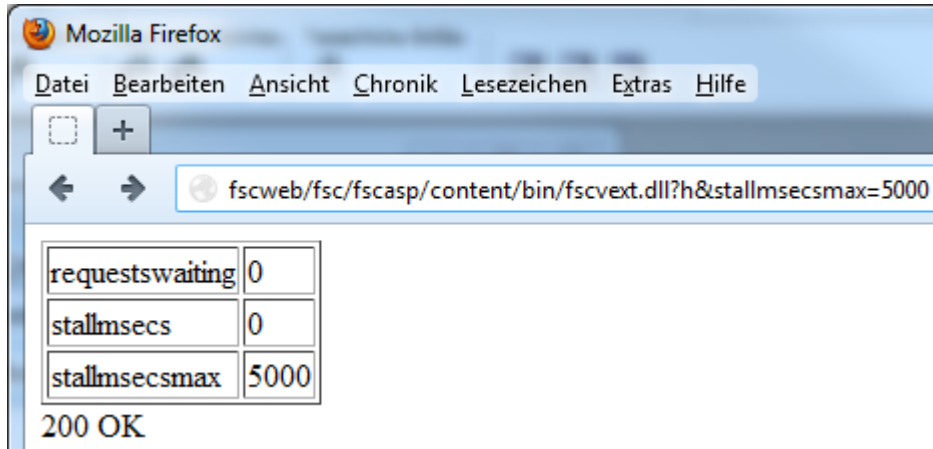
```
http://fscweb/fsc/fscasp/content/bin/fscvext.dll?h&stallmsecsmax=5000
```

In the `stallmsecsmax` parameter a time interval in milliseconds is specified. If waiting requests exist and no request is processed in the specified interval, an error message is returned.

If the time limit is not exceeded, the Fabasoft Folio Kernel will be tested. To do so, a login with the account, under which the Fabasoft Folio Web Service is running, is executed. If the login is successful, methods are called, which check the Fabasoft Folio Backend Services.

If all tests finish successfully, the HTTP status code “200 OK” is returned and status information is generated. The number of waiting requests for the Fabasoft Folio Web Service is shown in the

requestswaiting field. The stallmsecs field shows how long no request could be processed. The time interval defined in the URL is shown in the stallmsecsmax field.



If one of the tests fails, "503 Service Unavailable" is returned.

Note: On Linux, the `stallmsecsmax` parameter is not supported due to Apache request handling limitations. If all worker threads are in use, an HTTP probe blocks until a worker thread becomes available and the request is next in the request handler queue. The behavior of `stallmsecsmax` can be implemented by configuring the load balancer read timeout for HTTP probes accordingly.

4 fscping

The `fscping` tool provides a health check for Fabasoft Folio Backend Services. The health check is based on trying to establish a successful RPC communication. Additionally, the Fabasoft Folio HTTP Probe functionality can be executed.

In a standard installation the tool can be found here:

- Microsoft Windows
C:\Program Files\Fabasoft\Components\Management\Tools\fscping.exe
- Linux
/opt/fabasoft/bin/fscping

Example:

- `fscping -H server.comp.com -P 18070 -type coost`
- `fscping -H server.comp.com -P 18071 -crit 2 -version 1127 -type mmcst`
- `fscping -H server.comp.com -P 80 -type web -vdir fsc -user adm -password Folio`

Usage:

```
fscping -H host -P port [-crit <threshold>] [-warn <threshold>]
[-version <versionid>] [-q] [-n]
{
-type coost|
-type mmcst|
-type web [-vdir <virtualdirectory>] [-user <user> -password <password>]
}
```

- H
The host name of the server running the Fabasoft Folio Service.

- `P`
The port of the Fabasoft Folio Service. The port number for COO and MMC Services can be found for example in the Fabasoft Folio Server Management.
- `crit`
If the health check cannot be completed successfully within the defined seconds, the return value will be critical (default 5 sec).
- `warn`
If the health check cannot be completed successfully within the defined seconds, the return value will be a warning (default 1 sec).
- `version`
If the tool should check an older Fabasoft Folio installation, provide the first three parts of the version number of the installation. For example if the whole version is 11.2.2.113, enter "1122".
- `q`
No result text is displayed.
- `n`
A simple result string for example useable for Nagios is displayed.
- `type`
Possible values are `coost` (check COO service), `mmcst` (check MMC service) and `web` (Fabasoft Folio HTTP Probe). For the web option the virtual directory of the web service (default `fsc`), a user name and a password can be provided.

The exit status of the `fscping` tool is 0 (OK), 1 (warning) or 2 (critical).