

Goliath Application Availability Monitor

A Technical Overview

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Introduction: Business & Clinical Application Availability Testing

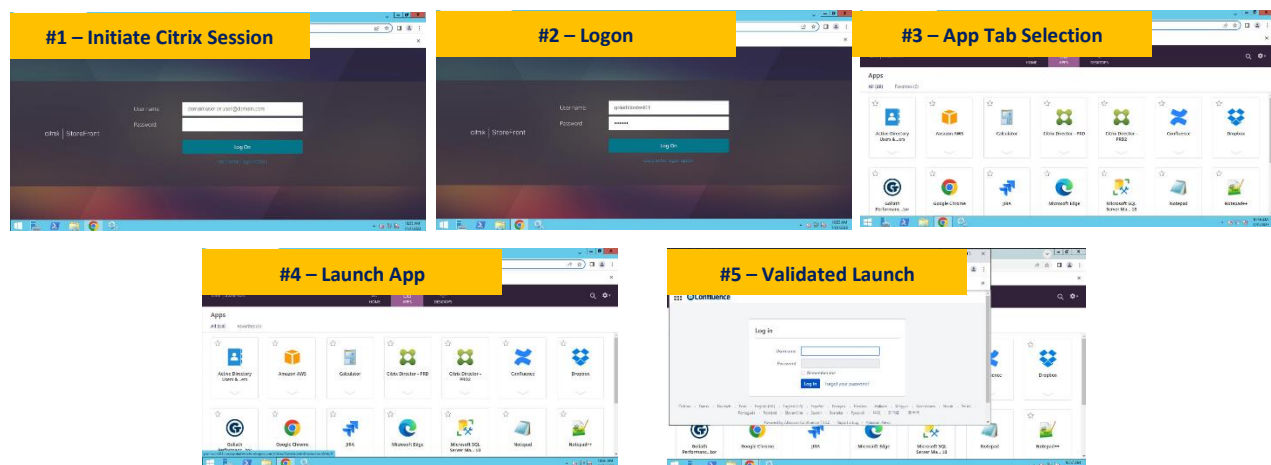
Failed or slow logon initiation is a top complaint of Citrix and VMware Horizon end users. Issues happen for any number of reasons from a VM running out of memory, host lacking RAM, network connection for a remote user, or many other common failures within the application delivery infrastructure. Most of the time, these issues are unknown by IT until an end user files a ticket or complaint. At this point, end-users are frustrated and unproductive while IT is frantically looking for a solution.

There is a better way to avoid all these issues.

Goliath's Application Availability Monitor continually tests application availability from remote locations to ensure availability of Citrix or VMware Horizon and the supporting delivery infrastructure. Included is the capability to proactively alert, in real-time, if an application is down or experiencing slowness at logon time so administrators can resolve before end users are impacted.

This is all made possible by Goliath's application launcher that initiates a real Citrix or VMware Session from the endpoint where the user is located (on-premises or in the cloud). The App Launcher automatically logs on like a real user to confirm Citrix or VMware Horizon availability and launches applications. All is configured exactly like a real user with the same permission settings as in Active Directory.

Below is a depiction of Goliath's App Launcher in action – automatically initiating a connection to the application and in doing so confirming that the entire application delivery infrastructure and workflow are working properly to launch applications.



Early Warning System

Goliath is the industry's leading proactive, production-ready end-user experience software that validates availability of the entire Citrix delivery infrastructure (including the NetScaler). It intelligently ensures availability by executing real Citrix sessions that exercise the exact same steps a user takes during the Citrix logon process. Regardless of whether a user is remote or local, Goliath gives administrators an "early warning system" that allows them to know exactly what the Citrix end-user experience will be like for their users - in advance.

Illustrated Below: (1) The Application Availability Monitor Dashboard displaying a real-time assessment of Citrix Availability and then (2) breaking down launch times by stage.



End User Screenshot Analytics

When there is a logon failure, an administrator receives an alert immediately. Using the logon details, an administrator can quickly pinpoint where the failure occurred and the root cause.

At each phase of the logon process for Citrix CVAD or VMware Horizon, Goliath takes a screenshot to provide visual evidence and objective proof of logon success or logon failure. This also provides objective evidence of the root cause of the logon issue that can be shared with management, vendors, and counterparts to end finger-pointing and put permanent fix actions in place.

Illustrated Below: Quickly drill down to investigate failures right from the application availability dashboard by clicking on the magnifying glass. In just three steps, you can then see where the logon issues occurred during the logon process and what the issue was:

Availability Analysis

Date	Application/Desktop	From	Account	Results
09/11/17 @ 09:30:54	SAP Logon	DEV.GLS-EP04	goliathloctest05	Failed during Launch stage

Timeline: 6.9s → 2.7s → 2.3s → 1.4s → 31.8s

Details

[09/11/2017 09:30:54.446]: Verifying that session launched for Resource='Internet Explorer - 65' and Title='Internet'

[09/11/2017 09:30:58.712]: No match on window title='Citrix Client Logon Message - \\Remote'

[09/11/2017 09:30:58.727]: Try #5: Waiting...

[09/11/2017 09:31:03.790]: No match on window title='Citrix Client Logon Message - \\Remote'

[09/11/2017 09:31:03.806]: Try #10: Waiting...

[09/11/2017 09:31:08.837]: No match on window title='Citrix Client Logon Message - \\Remote'

[09/11/2017 09:31:08.853]: Try #15: Waiting...

[09/11/2017 09:31:13.900]: No match on window title='Citrix Client Logon Message - \\Remote'

[09/11/2017 09:31:13.916]: Try #20: Waiting...

[09/11/2017 09:31:18.947]: No match on window title='Citrix Client Logon Message - \\Remote'

[09/11/2017 09:31:18.963]: Try #25: Waiting...

[09/11/2017 09:31:23.995]: Try #30: Waiting...

[11/2017 09:31:26.135]: Screenshot File Created: 1170911093126073_RunNameReceiver_Launch.png

[09/11/2017 09:31:26.135]: WARNING: Unable to confirm that session launched for Resource='Internet Explorer - 65' and Title='Internet'

[09/11/2017 09:31:26.151]: Verify-Launch result for Internet Explorer - 65 is

Where the issue occurred

Visual proof of the issue

Isolation of the failure point

1. In this case, failure occurred at the launch stage (marked by the '1')
2. The screenshot (2) proves that the application failed to launch and shows the root cause of the Citrix workflow and application launch failure as being the result of a licensing problem
3. By navigating to the "Details" or "Analytics" section (3), we can see that the launch failed at the point of verifying that Internet Explorer launched

Scheduling and Automation

Goliath has built-in logon scheduling functionality. This provides an easy-to-use, templated approach to constructing launch sequences. This gets you scheduled in minutes – not hours – without the need for custom scripting or recording sequences. Tests can be scheduled to run automatically and continuously across multiple applications, determining logon performance across different locations and/or different types of users as needed. For example, it can run throughout the day so your IT staff will know immediately if there is a problem and at which stage of the process the problem is occurring. Launches can be scheduled to execute, for example, before doctors or nurses start their shift or people arrive at the office, so IT can be alerted to issues before end users feel the impact of an application or desktop being unavailable.

Easy to use forms are available to facilitate creation, with no scripting required

Easily schedule launches, then plot how they are getting scheduled and optimize launch frequency using the schedule display

Name	Application/Desktop	End Point	Frequency	Next Run Time	Max Run Time	User Account	Status
GAAM - TEST #1 - SS	Internet Explorer - 65	DEVGLS-EP04	10 Minutes	Sep 19 2017 09:20:00	255 seconds	goliath\test05	
GAAM - Test #2 - no SS	Internet Explorer - 65	DEVGLS-EP03	1 Day		1440 seconds	goliath\test04	Suspended
Google Chrome	Google Chrome	DEVGLS-EP03	10 Minutes	Sep 19 2017 09:20:00	255 seconds	goliath\test05	
Test2	appName	DEVGLS-EP03	3 Hours	Suspended	195 seconds	user	

Alert Notifications

Goliath provides the ability to have alert notifications sent immediately if a workflow validation fails by email, SNMP, SYSLOG, or to a 3rd party ticketing or enterprise monitoring solution. This allows critical uptime and availability information to be delivered prior to end users knowing there is a problem.

Below is an example of the alert notification feature within the scheduling display.

The screenshot displays the Goliath console's 'Application Availability' section. A modal window titled 'Alerts' is open, showing options for 'Email', 'SNMP Trap', and 'Syslog'. A callout box states: 'Alerting is integrated with just a couple clicks to be notified immediately when failures occur'. Another callout box states: 'SNMP & Syslog capabilities are integrated to facilitate communication with ticketing solutions & technologies used by other teams'. The background shows a table of endpoints and a calendar view.

Endpoint	Name	User	App/Desktop
DEV-GLS-EP04	GAAM - TEST #1 - SS	goliath\test05	
DEV-GLS-EP03	GAAM - Test #2 - no SS	goliath\test04	
DEV-GLS-EP03	Google Chrome	goliath\test05	
DEV-GLS-EP03	Test2	user	

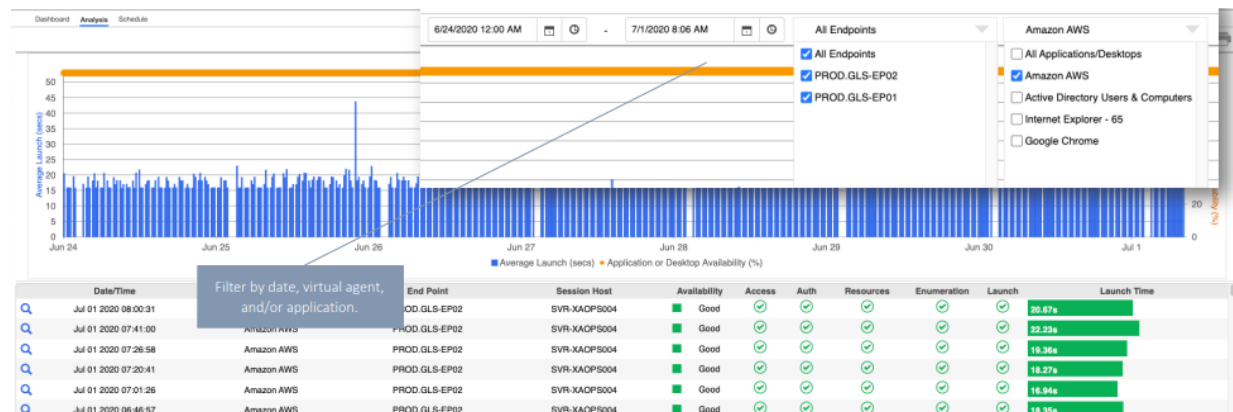
Name	Application/Desktop
GAAM - TEST #1 - SS	Internet Explorer - 65
GAAM - Test #2 - no SS	Internet Explorer - 65
Google Chrome	Google Chrome
Test2	appName

Max Run Time	User
255 seconds	goliath\
1440 seconds	goliath\
255 seconds	goliath\
195 seconds	u

Reporting

Goliath offers historical data to identify trends around clinical and business application availability and overall logon performance. This data can be viewed directly within the Goliath console filtered by date, endpoint from where the app launcher is executed, and application. Additionally, Goliath offers an out-of-the box report that can be shared via email, export (pdf, csv), or in the Goliath Console.

Goliath Central Console



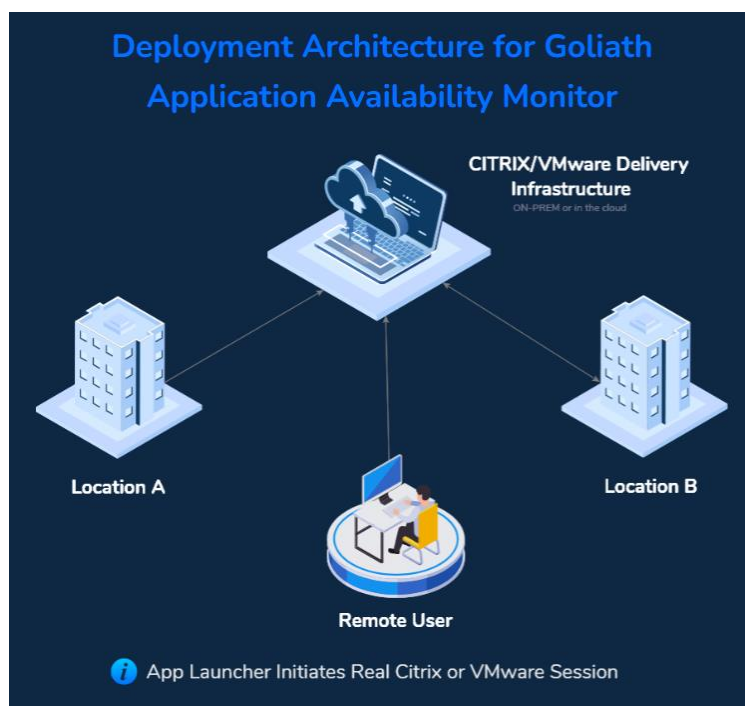
Out-of-the Box Application Availability Report

Alert & Log Analysis - GAAM				
Reporting Period: Wed Aug 02 2023 09:43:54 - Thu Aug 03 2023 09:43:54		Sort By: NA		Report Run: Thu Aug 03 2023 09:43:54
Watch/Alert Name	Type	Total Alerts		
Citrix Cloud	Is/View	32		
New Prod	Is/View	31		
VMware Horizon	Is/View	31		

Watch/Alert Name: Citrix Cloud				
Description:				
Watch/Alert Type: Is/View		Total Alerts: 32		
Server Name	Date/Time	URL App Name User Name	Status	Result Log
PROD.GLS-EP03				
PROD.GLS-EP03	2023-08-03 09:25:37.000	https://goliathtechn.dcloud.com/ Notepad goliath@lostest03	Failed	<div>Results Log Data:</div> <div> <div>Drill into details to identify point of failure</div> </div>
PROD.GLS-EP03	2023-08-03 08:41:04.000	https://goliathtechn.dcloud.com/ Notepad goliath@lostest03	Failed	
PROD.GLS-EP03	2023-08-03 07:55:57.000	https://goliathtechn.dcloud.com/ Notepad goliath@lostest03	Failed	<div>Results Log Data:</div> <div> <div>View application, user, and access gateway</div> <div>Application launch status</div> <div> <p>LOStart:08/03/2023 07:55:57 LODuration:-2 SessionHost: [08/03/2023 07:55:38.755]: ***** LAUNCHER SCRIPT BEGIN *****</p> <p>[08/03/2023 07:55:38.817]: -- Start Page Load Stage --</p> <p>[08/03/2023 07:55:38.833]: Launching Google Chrome</p> <p>[08/03/2023 07:55:56.380]: Profile Path = C:\Users\LOSTEST01\AppData\Local\Google\Chrome\User Data</p> <p>[08/03/2023 07:55:56.472]: Exception: unable to start</p> <p>[08/03/2023 07:55:56.442]: Exception calling ".do" with "1" argument(s): "Unable to obtain chrome using Selenium Manager. For documentation on this error, please visit: https://www.selenium.dev/documentation/webdriver/troubleshooting/#no-driver_location"</p> <p>[08/03/2023 07:55:56.442]: At C:\Program Files\MonitorIT\LOS_Script_17714328.ps1:449 char:42</p> <p>* ... ver -Value (New-Object OpenQA.Selenium.Chrome.ChromeDriver(\$chromeOpt ...</p> <p>[08/03/2023 07:55:56.458]: InvalidOperationException: () (New-Object). MethodInvocationException</p> <p>[08/03/2023 07:55:56.458]: ConstructorInvocationException,Microsoft.PowerShell.Commands.NewObjectCommand</p> <p>[08/03/2023 07:55:56.458]: Deleting all files and folders in the TEMP directory: C:\Users\LOSTES~1\AppData\Local\Temp</p> <p>[08/03/2023 07:55:56.505]: ***** LAUNCHER SCRIPT END *****</p> </div> </div>

Deployment Architecture to Test Across Remote Locations

To test application availability Goliath's app launcher is placed at the remote location and initiates a Citrix or VMware session in the on-premises or cloud environment, essentially wherever the infrastructure and applications are located.



Summary

Goliath's Application Availability Monitor is the leading solution that proactively measures logon performance by canvassing the entire delivery infrastructure exactly as an end user would use it. The Goliath App Launcher can do this over the same network using the same profile permissions/setup as the actual end user. The result is a continuous testing cycle that accurately reports issues - empowering administrators to identify and resolve end-user experience issues related to logon initiation and logon duration before productivity is hindered. Goliath's solution can be delivered to be deployed on-premises or delivered as a managed service.

Get started today with a free
[demo](#) or a [trial](#) of Goliath
Performance Monitor



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