

# How to Use the Logon Duration Tab to Troubleshoot Slow User Logons

**VDI-CWIN10MF03** ● InUse joe allen

Summary | **Logon** | ICA/HDX | vGPU | VDI Server | Hypervisor Host | Applications | Alerts/Logs

**Group Name:** Windows 10 MCS Floating **Client Address:** 172.31.0.29  
**Broker Name:** SVR-XDDC02 **Version:** 19.9.0.21

**Logon Summary**  
 Logon: **64.819 s** Connect: 2019-11-10 09:21:46 Session Start: 2019-11-10 09:22:00 Session End: --- Duration: 0h 4m 9s

**Logon Duration Brokering**

Delivery Controller Stages		Citrix Receiver Startup Stages	
Credentials Authentication:	1.078 s	Printer Creation:	0 s
Credentials Obtention:	0 s	Profile Load:	42.719 s
Credentials Obtention Network Server:	0 s	Program Neighborhood Cred Obtention:	0 s
Drive Mapping:	0.078 s	Session Creation:	1.234 s
Logon Script Execution:	42.719 s	Session Start-up:	102.734 s
		Application Enumeration Client:	0 s
		Backup URL Client Count:	0 s
		Configuration Obtention Client Duration:	0 s
		Credentials Obtention Client:	0 s
		ICA File Download:	0.36 s
		Launch Page Web Server Duration:	2.204 s
		Name Resolution Client:	0 s
		Name Resolution Web Server:	0.86 s
		RECONNECT_ENUM_CLIENT:	0 s
		RECONNECT_ENUM_WEB_SERVER:	0 s
		STARTUP_CLIENT:	11.487 s
		Session Creation Client:	2.892 s
		Session Look-up Client:	0.001 s
		Ticket Response Web Server:	0.001 s

**Logon Stage Details**

Stage	Description	Start	Duration	Timeline
Brokering	Session brokering time	2019-11-10 09:21:01.320	0.047 s	16.04 s
Client Validation	Brokering and Endpoint Launch execution including launching the client	09:21:01.320	12.347 s	32.081 s
Server Validation	Server-side session validation time	09:21:01.320	13.007 s	48.121 s
➤ Authentication	User authentication, Policy Retrieval, and logon script determination at the session host	09:21:52.953	1.078 s	64.181 s
➤ GPO	Group Policy Execution	09:21:54.991	4.967 s	
Profile	User Profile loading	09:21:51.213	1.73 s	
Interactive Session	Background processing for completing the load of the user's environment	09:21:52.943	12.537 s	

Estimated network bandwidth on one of the connections: 3515813 kbps.

Combining in-depth Citrix data along with Windows OS logging data, the logon tab breaks down the user's login from start to finish giving the administrator usable metrics and reducing troubleshooting times. The logon tab is comprised of 4 different sections providing you with a wide variety of data to assist in diagnosing slow logon times.

**Group Name:** Windows 10 MCS Floating **Client Address:** 172.31.0.29  
**Broker Name:** SVR-XDDC02 **Version:** 19.9.0.21

From the top, the first section is going to provide the Delivery Group name, the endpoints IP address, the Citrix broker responsible for the connection and the version of Citrix Receiver/Workspace the endpoint has installed.

# Logon Summary

## Logon Summary

Logon: 64.819 s    Connect: 2019-11-10 09:21:46    Session Start: 2019-11-10 09:22:00    Session End: ---    Duration: 0h 4m 9s

The summary section is where you'll find your actual logon duration number as well as when the session started, ended and how long the user has been in the session.

## Logon Duration Brokering Stages

### Logon Duration Brokering

Delivery Controller Stages			
Credentials Authentication:	1.078 s	Printer Creation:	0 s
Credentials Obtention:	0 s	Profile Load:	42.719 s
Credentials Obtention Network Server:	0 s	Program Neighborhood Cred Obtention:	0 s
Drive Mapping:	0.078 s	Session Creation:	1.234 s
Logon Script Execution:	42.719 s	Session Start-up:	102.734 s

- **Credentials Authentication:**
  - The time spent on the server authenticating the user credentials against Active Directory.

#### How to Troubleshoot Slow Authentication:

A slow authentication stage may lead you to looking at an improper site configuration. An example would be if your user is logging into a data center in one location and is being authenticated by a domain controller in another physical location. Another thing to consider would be a site DNS issue.

- **Credentials Obtention:**
  - The time taken for credentials to be passed through to the server.
- **Credentials Obtention Network Server:**
  - Network credential retrieval for passthrough authentication.
- **Drive Mapping:**
  - Client passthrough drives, port and device mapping.

#### How To Troubleshoot Incorrect Drive Mapping:

Create policies to disable unnecessary ports, drives and devices.

- **Login Script Execution:**
  - Time spent executing user login scripts.

#### How To Troubleshoot Failing Login Scripts:

Find scripts executed by the user and manually run them to observe how long they take to execute and observe failures in execution that may cause delays.

- **Printer Creation:**
  - The time spent mapping the user's client printers.
- **Profile Load:**
  - The time spent loading the user's profile.

### **How To Troubleshoot Size of the Profile Load and Impact on Logon Performance:**

Check the size of the user's roaming profile. Find large folders and work on creating policies to reduce the number of folders and files included in the profile.

- **Program Neighborhood Cred Obtention:**
  - The time needed for the server to cause the Program Neighborhood instance running on the client to obtain the user credentials.
- **Session Creation:**
  - The time the server spends creating the session.
- **Session Startup:**
  - This is the high-level server-side connection start-up metric that encompasses the time XenDesktop takes to perform the entire start-up operation. When an application starts in a shared session, this metric is normally much smaller than when starting a new session, which involves potentially high-cost tasks such as profile loading and login script execution.

## Citrix Receiver Startup Stages

### Citrix Receiver Startup Stages

Application Enumeration Client:	0 s	Name Resolution Web Server:	0.86 s
Backup URL Client Count:	0 s	RECONNECT_ENUM_CLIENT:	0 s
Configuration Obtention Client Duration:	0 s	RECONNECT_ENUM_WEB_SERVER:	0 s
Credentials Obtention Client:	0 s	STARTUP_CLIENT:	11.487 s
ICA File Download:	0.36 s	Session Creation Client:	2.892 s
Launch Page Web Server Duration:	2.204 s	Session Look-up Client:	0.001 s
Name Resolution Client:	0 s	Ticket Response Web Server:	0.001 s

- **Application Enumeration Client:**
  - Application enumeration is one of the issues slowing down session start times.
- **Backup URL Client Count:**
  - If this metric has a value higher than 1, it indicates the Web Interface server is unavailable and the Citrix Receiver is attempting to connect to back up Web Interface servers to launch the application.
- **Configuration Obtention Client Duration:**
  - The time it takes to get the configuration file from the XML server.
- **Credentials Obtention Client:**
  - The time it takes to obtain user credentials when the user credentials are manually entered by the user.
- **ICA File Download:**
  - The time it takes for the client to download the ICA file from the server.
- **Launch Page Web Server Duration:**
  - Review the information for IFDCD. The LPWD metric is only used when Web Interface is the application launch mechanism.
- **Name Resolution Client:**
  - This metric is collected when a client device directly queries the XML Broker to retrieve published application information stored in IMA (for example, when using Program Neighborhood or a Custom ICA Connection). NRCD is only gathered for new sessions since session sharing occurs during startup if a session already exists.

#### How to Troubleshoot Slow Logons with High Name Resolution Client Times:

When this metric is high, it indicates the XML Broker is taking a lot of time to resolve the name of a published application to an IP address. Possible causes include a problem on the client, issues with the XML Broker (such as the XML Broker being overloaded), a problem with the network link between the two, or a problem in IMA. Begin by evaluating traffic on the network and the XML Broker to isolate the specific root cause.

### **Name Resolution Web Server:**

- When this metric is high, there could be an issue with the Web Interface server or the XenApp plugin site (formerly known as the Neighborhood Agent site), the XML Service, the network link between the two, or a problem in IMA.

#### **How to Troubleshoot Slow Logons with High Name Resolution Web Server Times:**

Like NRCD, this metric indicates how long it takes the XML service to resolve the name of a published application to a XenApp IP address. However, this metric is collected when a Web Interface site is performing this process on behalf of a launch request it has received from either the XenApp plugin (previously known as Program Neighborhood Agent) or from a user clicking a Web Interface page icon. This metric applies to all sessions launched through the Web Interface or the Citrix Online Plugin (formerly, the Program Neighborhood Agent).

- **Reconnect Enum Client:**
  - The time spent for the user's client to get a list of reconnectable sessions.
- **Reconnect Enum Web Server:**
  - The time it takes the Web Interface to get the list of reconnections for this user from the XML service.
- **Session Creation Client:**
  - The time it takes to create a new session, from the moment wfica32.exe is launched to when the connection is established.
- **Session Lookup Client:**
  - The time it takes to query every session to host the requested published application.
- **Ticket Response Web Server:**
  - The time it takes to get a ticket from the STA server or XML service.

#### **How to Troubleshoot Slow Logons with High Ticket Response Web Server Times:**

This can indicate that the Secure Ticket Authority server is overloaded.

## Logon Stage Details

This portion is unique to Goliath. It takes a granular approach to the login process by combining the above metrics with information included in the Goliath logs. This approach saves time and testing because it calls out specific details during login that an administrator would normally have to dig through logs to obtain.

### Logon Stage Details

Stage	Description	Start	Duration	Timeline			
				10.04 s	32.081 s	48.121 s	64.161 s
Brokering	Session brokering time	2019-11-10 09:21:01.320	0.047 s				
Client Validation	Brokering and Endpoint Launch execution including launching the client	09:21:01.320	12.347 s				
Server Validation	Server-side session validation time	09:21:01.320	13.007 s				
Authentication	User authentication, Policy Retrieval, and logon script determination at the session host	09:21:52.953	1.078 s				
	<b>Account details:</b> Account Name : CN=joe allen,OU=Goliath,OU=Accounts,DC=corp,DC=goliathtechnologies,DC=com Account Domain Name : CORP.GOLIATHTECHNOLOGIES.COM DC Name : \SVR-DC01.corp.goliathtechnologies.com DC Domain Name : CORP.GOLIATHTECHNOLOGIES.COM	09:21:52.958	0 s				
	<b>Domain Controller details:</b> Domain Controller Name : SVR-DC01.corp.goliathtechnologies.com Domain Controller IP Address : 10.20.30.5	09:21:52.953	0.39 s				
	<b>Making system calls to access specified file.</b> \\corp.goliathtechnologies.com\sysvol\corp.goliathtechnologies.com\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\gpt.ini Making system calls to access specified file. \\corp.goliathtechnologies.com\SysVol\corp.goliathtechnologies.com\Policies\{3EB5B4B6-76AF-479C-BDE3-477A2BC02570}\gpt.ini Making system calls to access specified file. \\corp.goliathtechnologies.com\SysVol\corp.goliathtechnologies.com\Policies\{206BB4FE-3652-4ACA-9066-6827F0710DA0}\gpt.ini	09:21:53.794	0.333 s				
GPO	Group Policy Execution	09:21:54.991	4.967 s				
	<b>Starting Registry Extension Processing.</b> Name: Win 10 VDA Settings	09:21:54.991	0.039 s				
	Starting Citrix Group Policy Extension Processing, Local Group Policy\Local Group Policy	09:21:55.031	0.335 s				
	Starting Folder Redirection Extension Processing, Win 10 VDA Settings	09:21:55.371	0.75 s				
	<b>Citrix Profile Management Extension</b> Starting Citrix Profile Management Extension Processing.	09:21:56.123	0.172 s				

Some of the stages are expandable which allows administrators to drill into specifics about a segment of the logon process.

Authentication	User authentication, Policy Retrieval, and logon script determination at the session host	09:21:52.953	1.078 s				
	<b>Account details:</b> Account Name : CN=joe allen,OU=Goliath,OU=Accounts,DC=corp,DC=goliathtechnologies,DC=com Account Domain Name : CORP.GOLIATHTECHNOLOGIES.COM DC Name : \SVR-DC01.corp.goliathtechnologies.com DC Domain Name : CORP.GOLIATHTECHNOLOGIES.COM	09:21:52.958	0 s				
	<b>Domain Controller details:</b> Domain Controller Name : SVR-DC01.corp.goliathtechnologies.com Domain Controller IP Address : 10.20.30.5	09:21:52.953	0.39 s				
	<b>Making system calls to access specified file.</b> \\corp.goliathtechnologies.com\sysvol\corp.goliathtechnologies.com\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\gpt.ini Making system calls to access specified file. \\corp.goliathtechnologies.com\SysVol\corp.goliathtechnologies.com\Policies\{3EB5B4B6-76AF-479C-BDE3-477A2BC02570}\gpt.ini Making system calls to access specified file. \\corp.goliathtechnologies.com\SysVol\corp.goliathtechnologies.com\Policies\{206BB4FE-3652-4ACA-9066-6827F0710DA0}\gpt.ini	09:21:53.794	0.333 s				







The Authentication section is key to determining which domain controller processed the login as well as the time it took to read group policy objects. One of the key metrics here is the domain controller's location. An improper site configuration could have a client authenticating through a domain controller not local to the client. Another key metric would be the client's ability to read the Group Policy file and how long that read takes.

▼ GPO		Group Policy Execution	09:21:54.991	4.967 s	
		<b>Starting Registry Extension Processing.</b>	09:21:54.991	0.039 s	
		<i>Name: Win 10 VDA Settings</i>			
		Starting Citrix Group Policy Extension Processing. Local Group PolicyLocal Group Policy	09:21:55.031	0.335 s	
		Starting Folder Redirection Extension Processing. Win 10 VDA Settings	09:21:55.371	0.75 s	
		<b>Citrix Profile Management Extension</b>	09:21:56.123	0.172 s	
		Starting Citrix Profile Management Extension Processing.			
		<b>Group Policy Drive Maps Extension</b>	09:21:56.314	1.578 s	
		Starting Group Policy Drive Maps Extension Processing.			
		<i>Name: VDI Drive Mappings</i>			
		<b>List of applicable Group Policy objects:</b>			
		<i>Name: Local Group</i>			
		<b>The following Group Policy objects were not applicable because they were filtered out :</b>			

The GPO section displays the amount of time to process each group policy. Long GPO processing could indicate invalid printer mapping and network drive mapping.

### How to Troubleshoot Slow Logons with Long GPO Processing Times:

The image below is a real-world example of how the GPO section can be used to identify the root cause for slowness issues during a user's logon. This section breaks out each policy name, the time each one takes and a Gantt chart showing the policies that are causing problems. Here you see that a VDI drive map adding 180 seconds is indicative of a 3-minute timeout which means that the drive in this case may not be available.

▼ GPO		Group Policy Execution	13:03:53.966	11.66 s	
		<b>Starting Registry Extension Processing.</b>	13:03:53.966	0.078 s	
		<i>Name: Win 10 VDA Settings</i>			
		Starting Citrix Group Policy Extension Processing. Local Group PolicyLocal Group Policy	13:03:54.045	0.314 s	
		Starting Folder Redirection Extension Processing. Win 10 VDA Settings	13:03:54.364	9.083 s	
		<b>Citrix Profile Management Extension</b>	13:04:03.450	0.078 s	
		Starting Citrix Profile Management Extension Processing.			
		<b>Group Policy Drive Maps Extension</b>	13:04:03.535	180.6 s	
		Starting Group Policy Drive Maps Extension Processing.			
		<i>Name: VDI Drive Mappings</i>			
		<b>List of applicable Group Policy objects:</b>			
		<i>Name: Local Group</i>			
		<b>The following Group Policy objects were not applicable because they were filtered out :</b>			