

## **Technology Requirements**

Fannie Mae's technology solutions require a standard hardware and software configuration. Users' systems should adhere to the requirements listed below to experience technology performance at or above the expected levels as determined by our performance baseline testing. Most requirements and settings must be set up at an organizational level. Individual users should involve their organizational information technology department to address any concerns or questions before contacting Fannie Mae.

This information *does not apply* to integration solutions; see the <u>Technology Integration web page</u> for details.

## **Information Security**

Fannie Mae is intensely focused on the security of our technology tools, customer transactions, and data provided to us. We require specified security settings for users to help keep your and our systems and data safe. We also continuously monitor the information security environment and update our security requirements as needed.

Hardware/Software Specifications	Configurations
Operating System	Fannie Mae applications are currently compatible with computers that run on the Microsoft <sup>®</sup> Windows <sup>®</sup> 8.1 Enterprise Edition (see <u>Windows 8.1 Enterprise</u> <u>Edition System Requirements</u> for more technical information).
	Desktop Underwriter <sup>®</sup> and Desktop Originator <sup>®</sup> have also been tested for compatibility with Windows 10.
	For more information on Microsoft's support policy regarding the Windows family of desktop operating systems, visit <u>Microsoft's website</u> .
	Technical support is not provided for running our applications on other operating systems or on multi-user, "thin-client" solutions such as Citrix <sup>®</sup> .
Communications	Use an Internet Service Provider (ISP) of your choice to provide a high-speed Internet connection (T1, DSL, cable, fiber-optic).
Web Browser	Your Web browser must be set to enable Java <sup>™</sup> and JavaScript <sup>™</sup> and to accept cookies. The following browsers have been tested with our secure servers and are necessary for secure connections:
	Microsoft Internet Explorer <sup>®</sup> 11
	Mozilla Firefox <sup>®</sup> Version 38.1.1
	<ul> <li>Google Chrome<sup>™</sup> Version 46</li> </ul>
	Our technology applications are developed to run most optimally on the web browser versions listed. Users may encounter unexpected behavior and/or loss of some functionality if attempting to use a lower (or higher) version of the compatible browsers, or browsers not listed.

## **Standard Specifications and Configurations**



Hardware/Software Specifications	Configurations
Security Settings	<ul> <li>Transport Layer Security (TLS) Version 1.2</li> <li>SHA-2 certificate</li> </ul>
Domain Name System (DNS) Configuration	To maintain reliable connections to Fannie Mae, we recommend using these DNS practices for network connection settings:
	<ul> <li>Use a single DNS server to resolve all queries to Fannie Mae. This server should be able to do recursive DNS queries and another DNS server should be used only if the first one fails to respond.</li> </ul>
	<ul> <li>If at all possible, do not route DNS queries to multiple DNS servers.</li> </ul>
	<ul> <li>Allow DNS to perform queries for address resolution from the authoritative source and honor the default time to live (TTL).</li> </ul>
	<ul> <li>To avoid application issues, do not cache the DNS resolution beyond 60 seconds.</li> </ul>
	<b>Note:</b> The Desktop Underwriter and Desktop Originator URLs are resolvable across the Internet.
Adobe® Acrobat® Reader	Many documents on our website are in Adobe Portable Document Format (PDF). Download the free Adobe Acrobat Reader from <u>Adobe's website</u> to view and print PDF files.
	We recommend opening PDF Guide Forms in Internet Explorer. You may also download a PDF form to your computer and then open the form using Adobe Acrobat. <u>Click here</u> for more information on displaying PDFs in a browser.

## **For More Information**

For more information or assistance, please contact your Fannie Mae customer account team or our <u>Technology Support Center</u> (open every day, 24 hours a day, except major holidays).