RIVERBED PRODUCT RELEASE NOTES

PRODUCT: RIVERBED MODELER

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VERSION: 18.10.0

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1) NEW FEATURES AND USER GUIDE ADDENDUM

Note: Modeler 18.10.0 does not include an updated User Guide. The content below serves as an addendum to the Modeler 18.6.1 User Guide together with the Release Notes documents of all the releases after Modeler 18.6.1.

Modeler 18.10.0 includes support for additional Windows platforms and compilers, support for Python 3, and enhancements to the WLAN and OSPF models.

- **New Windows Compilers Supported**

  Starting with release 18.10, Modeler is built for Windows using the new generation of Microsoft Visual Studio compilers. As a result, Modeler supports the new compilers listed below on the Windows platforms for the Modeler users who develop their own models:

  - Microsoft Visual Studio 2015

  - Microsoft Visual Studio 2017

  - Microsoft Visual Studio 2019

  - Microsoft Visual Studio 2022

  For all of these compilers, their Community, Professional, and Enterprise editions are supported.

  Due the incompatibility between the new and previous generations of Microsoft Visual Studio compilers, Modeler 18.10 does not support any of the Windows compilers that are supported by the previous Modeler releases. Therefore, if you are using Modeler on a Windows platform and building your own models for your projects, when upgrading to Modeler 18.10 from a previous Modeler release, you must also upgrade your compiler on that Windows machine to one of the compilers listed above.

  While Modeler 18.10 is being installed, the installer process will check the existing installation of the supported Windows compilers. If a supported compiler is found, but is not configured in order to be used with Modeler, the installer process will display a warning message and modify "Modeler 18.10" and "Modeler 18.10 Console" shortcuts it creates such that when these shortcuts are executed, they will attempt to do the compiler configuration for 64-bit simulations for that session of the application. If these configuration attempts are not successful, or if you would like to configure the compiler for 32-bits simulations or in a permanent way for Modeler, then please refer to Knowledge Base entry S20843 at Riverbed Support Site for the instructions on how to configure your Windows compiler to be used with Modeler.

- ## New Supported Windows Platforms

  Modeler 18.10 adds these Windows operating systems to supported Windows platforms:

  - Windows 11

  - Windows Server 2019

  - Windows Server 2022

  Please see Modeler 18.10 System Requirements document for more details on supported platforms.

- ## Supported Python Version Upgraded

  Starting with release 18.10, Python version supported and included by Modeler is upgraded from Python 2.7 to Python 3.7. Since Python 3 is not backward compatible with Python 2, all the components of Modeler product and its modules that are implemented in Python are upgraded to Python 3. As a result of this upgrade, if you have your own Modeler features or models that are implemented in Python or contain Python code, you must upgrade their Python code to Python 3 in order to use them with Modeler 18.10.

- ## Wireless LAN Model Enhancements

  ### Configurable Reserved Buffer Size Capacity for Access Category Transmission Queues:

  The MAC layer of WLAN model has been enhanced to support the reservation of portions of the buffer capacity for the transmission queues of each Access Category defined in the IEEE 802.11 standard. As a result of this enhancement, two new attributes are introduced. The first new attribute:

  - Wireless LAN Parameters > EDCA Parameters > **Buffer Size Sharing Scheme**

  specifies whether the whole buffer size is commonly shared by all the access categories on a first-come-first-served basis (i.e., the behavior in the earlier releases) or each access category has a portion of the total buffer size exclusively reserved for its transmission queue.

  The second new attribute, which can be configured separately for each access category:

  - Wireless LAN Parameters > EDCA Parameters > Access Category Parameters > Access Category > **Buffer Size Share (%)**

specifies the portion of the buffer reserved for that access category's transmission queue as a percentage of the MAC's total buffer size. This attribute is taken into consideration only when **Buffer Size Sharing Scheme** attribute is set to **Reserved Capacity for Each AC**.

The new behavior where each access category has its own reserved portion of MAC's buffer capacity is also the new default behavior. Therefore, the simulation results of your WLAN scenarios may change in Modeler 18.10 (to switch back to the old behavior, set **Buffer Size Sharing Scheme** attribute to **Shared Usage of Whole Capacity** for all WLAN MACs in the scenario). "Wireless LAN Parameters > **Buffer Size**" attribute still specifies the total capacity of MAC's buffer for the access category transmission queues regardless of which buffer sharing scheme is used. Since now each access category uses only a portion of the buffer size under default configuration, the default value of Buffer Size attribute has been increased in order to minimize the impact of the default configuration changes on simulation results, especially for the WLAN MACs that are handling the traffic belonging only to one access category.

Obsolete Technologies Removed:

Obsolete PHY technologies Infra-Red and Frequency Hopping Spread Spectrum (FHSS) are now removed from the WLAN model suite.

- ## OSPF Model Enhancements

  A new utility has been added to Protocols menu of Project Editor for configuring OSPFv3 area information for IP interfaces running OSPFv3. The new utility together with existing OSPFv3 related utilities are now grouped under the new "Protocols > OSPFv3" menu option.

2) FIXED PROBLEMS

The bugs fixed in this release include these critical Modeler 18.9.0 bugs:

- **Bug 316043**: When launching Modeler, License Server fails to check out perpetual "3D Network Visualizer GUI" license if the maintenance of the license has expired.

- **Bug 316037**: Trying to set a value for a promoted trajectory attribute as an input for the simulation run makes Modeler abort.

- **Bug 316000**: SDN switches reject special Table ID "All Tables" in controller's flow table entry delete messages as "Bad Table ID".

- **Bug 315988**: OpenFlow "Get Config Reply" messages sent by SDN switches are malformed (the length field is set to 20 instead of 12).

- **Bug 259558**: 6PE Tunneling of IPv6 traffic over IPv4 MPLS backbone network does not work.

3) KNOWN ISSUES

There are no known critical issues in Modeler 18.10.0.

4) INSTALLATION/UPGRADE

For details about installing Modeler 18.10.0, see the *Installation Instructions,* available from the Riverbed Support site.

5) HARDWARE AND SOFTWARE REQUIREMENTS

See the *System Requirements* on the Riverbed Support site for a list of system requirements, supported operating systems, and supported web browsers.

6) CONTACTING RIVERBED SUPPORT

Visit the [Riverbed Support site](#) to download software updates and documentation, browse our library of Knowledge Base articles and manage your account. To open a support case, choose one of the options below.

Phone

Riverbed provides phone support at 1-888-RVBD-TAC (1-888-782-3822). Outside the U.S. dial +1 415 247 7381.

Online

You can also submit a [support case online.](#)

Email

Send email to support@riverbed.com. A member of the support team will reply as quickly as possible.