



## AppLibrary: Create Mix of Application Traffic at Scale

# AppLibrary



*Emulate Realistic Application Mixes from a Pre-Defined Library of Application Flows*

## The Need For Specialized Testing

The explosion of smart devices and multimedia applications that fuel our always-connected lifestyle is over-running legacy networks. This convergence is driving an unprecedented need for network bandwidth, intelligence, and performance. Today, enterprise and service provider networks require not only bandwidth, but application intelligence and awareness to recognize and prioritize traffic and deliver end user quality of experience (QoE).

The introduction of application-awareness in network equipment significantly broadens the scope of testing requirements. These content-aware devices that leverage deep packet inspection (DPI) not only have the ability to recognize applications, but also identify the end-users/subscribers originating the traffic, content type within the applications (text, graphic, pdf, or virus) and even the originating devices (smart phone, PC, etc.). In addition, service providers are using this information to apply classification and policies for better QoE and deliver application- or subscriber-specific bandwidth management to better monetize networking resources.

To verify that the performance, conformance, and functionality of these intelligent networks and devices equate to a high QoE, enterprises, service providers, and equipment manufacturers require more complex and specialized testing than ever before.

## AppLibrary

Ixia's AppLibrary delivers a simplified workflow and framework to emulate realistic application mixes from a pre-defined library of application flows. It is a common library that is shared among Ixia's **IxNetwork**, **IxLoad**, and **IxChariot** applications.

AppLibrary is enabled by Ixia's BreakingPoint Application and Threat Intelligence (ATI) program. It validates the scale and performance capabilities of content-aware devices and networks by emulating real-world traffic that includes the blend of applications used on today's networks, all at line-rate 10G speeds. It also provides granular measurement capabilities to validate the impact and effectiveness of QoS policies on application performance and end-user QoE.



With AppLibrary, users are able to address the following test use cases:

Application Recognition	Multi-Protocol Performance	Application Traffic Management and Policing
A pre-defined library of applications validate the accuracy of recognition and classification engines in application-aware devices	Benchmark the performance and capacity of content-aware networks and devices with deterministic real-world application mixes	Per-flow statistics validate traffic management policies (rate-limiting, blocking, or prioritizing based on application) and performance impact on application QoE

## Key Features

- Uses Ixia BreakingPoint ATI to provide an extensive library of pre-defined application flows to simulate end-user interactions and devices
- Always keep current with monthly subscription service that offers the latest application flows and updates for existing flows
- Well-researched, pre-defined application mixes for easy re-creation of enterprise and service provider network characteristics
- Deterministic multi-application performance distributions at 10G line-rate

- Scale test in terms of throughput, simulated users, connections per second, transactions per second, and concurrent connections
- Comprehensive real-time analysis including per-application latency and detailed reports to pin-point application performance issues
- Support for both IPv4 and IPv6

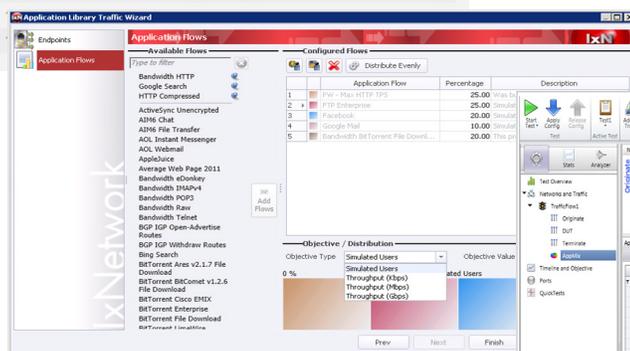
## Hardware Support

- For IxLoad, AppLibrary is supported on Ixia's PerfectStorm, PerfectStorm ONE, Xcellon-Ultra NP/NG, NGY-NP, XMVDC-NG load modules and Xcellon-Ultra XT80 and XTS40 appliances (XTS40 only supports Unencrypted NICs)
- For IxNetwork, AppLibrary is supported on Ixia's XMVDC, XMVDC-NG, NGY-NG, NGY-NP, Xcellon, and IxVM load modules
- For IxChariot, AppLibrary is supported on Ixia's XR2000 Active Monitoring Probe

### AppMix 1

Application	% Distribution	Lock	Users
Facebook	20		10
Gnutella	13.4		10
Google Search	13.4		10
Bandwidth HTTP	13.3		10
Google Mail	13.3		10
MS-SQL Server			
Outlook Web Access			

### Using AppLibrary in IxChariot



Using AppLibrary in IxNetwork



Using AppLibrary in IxLoad