# BigFix 10 Relay Efficiency: Faster Than Ever & Consuming Fewer Resources!

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Most software wants to go "faster". Workload demands increase. Deadlines get shorter. Pressure builds. Usually speed comes with a cost: the need for more resources. These resources could be CPU, storage, memory, etc. The BigFix 10.0.5 release has delivered something pretty special: relays are faster than ever while consuming <u>fewer</u> resources! Even better, this is all managed automatically for your deployment! Simply upgrade, and the "magic" happens! Let us explain how we achieved this.
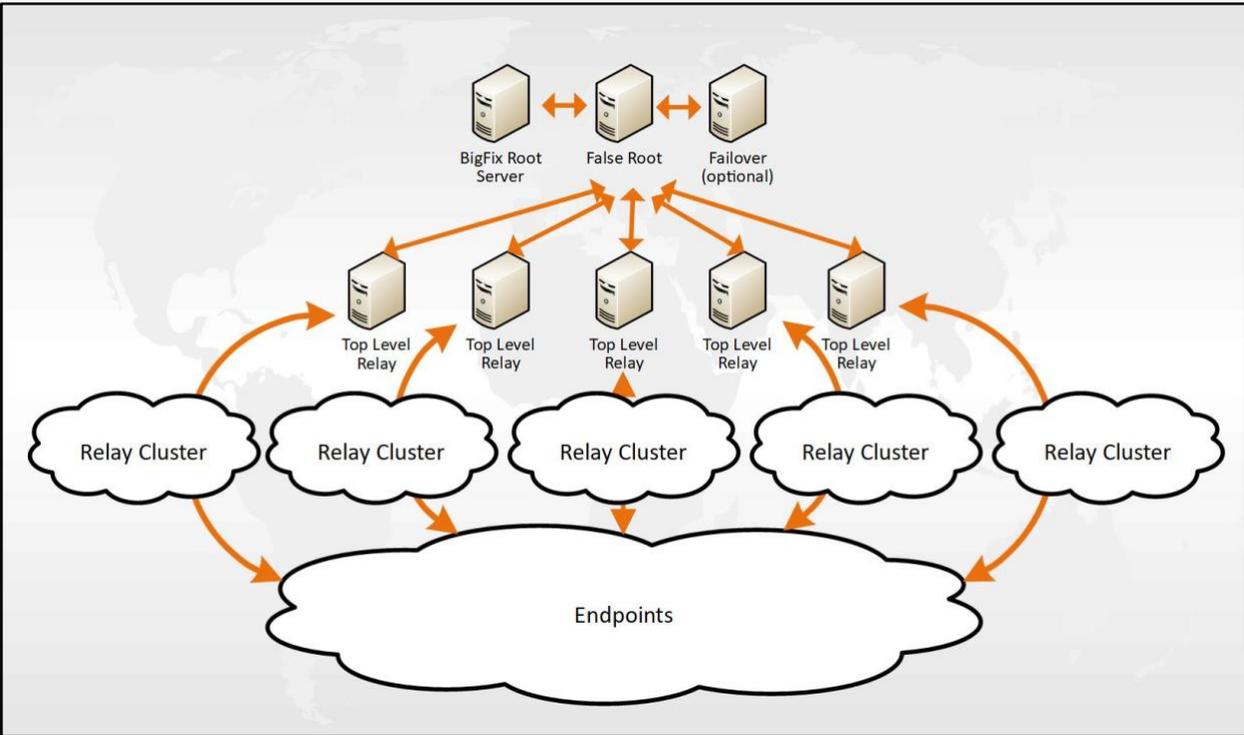
The figure shows an abstraction for a large BigFix deployment. Most deployments consist of a hierarchy of relays to manage content and reports. This hierarchy offers high scale through a tree structure. Content traverses this tree structure between the root server(s), and the endpoints, through what we will refer to as a "relay chain". Essentially, a bi-directional tree traversal path.

The BigFix 10.0.5 release has introduced automatic resource pooling for this tree traversal path. What this means is all communication is now more efficient. To be more specific, communication is typically via the TLS 1.2 secure protocol. This protocol has an initial handshake that requires two round trips

between both parties and is considered expensive. Through the automatic pooling, we incur less connection overhead by reducing the need for the handshake setup and tear down.

So how much more efficient is the relay chain? Throughput improvements of 600% have been measured in our labs. In addition, connection reductions of 75% have been demonstrated. These improvements are manifested at every node in the chain. This is really the performance dream: to go faster while consuming fewer resources. With BigFix 10.0.5, you can realize this dream!

If you would like more information on relays and capacity management, it is highly recommended to read the BigFix Capacity Planning guide. In addition, capacity planning tools are provided through the guide to simplify the process of determining the requirements for a BigFix installation.

BigFix continues to "find it and fix it… fast!"… with unprecedented efficiency!

Further Reading

In the event further reading is desired, the following technical resources are available.

BigFix Platform Documentation: [URL](URL)
BigFix Capacity Planning Guide: [URL](URL)