



Faster Data Center Automation, SDN Migration, and Cloud Deployments

The benefits of data center automation—including OpEx reduction, scaling to meet demand, and expediting time to market of mission-critical services and applications—continue to attract interest from many organizations globally. Making the transition toward automation is difficult and complex, which prevents many IT teams from moving forward with their OpEx reduction plans. These issues sometimes delay software-defined networking (SDN) and migration to the cloud, at a significant opportunity cost.

To assist organizations with making this transition, F5® Professional Services offers the F5 BIG-IP® Local Traffic Manager™ (LTM) Automation Service. It removes significant obstacles to achieving automation and OpEx reduction in the data center, within a BIG-IP LTM device environment.

Key Benefits

Increase flexibility of and automate your BIG-IP investment

Automate BIG-IP LTM and move forward with additional automation projects such as SDN and cloud migration.

Maximize your investment

Optimize the configuration of your BIG-IP LTM investment throughout the data center and plan for scalability and further OpEx reduction.

Achieve alignment

Achieve device configurations that align business objectives with technical requirements.

Mitigate risk

Take advantage of F5 device and services automation, application delivery, and cloud subject matter expertise to achieve a more robust BIG-IP LTM configuration design.

Automation Goals

Organizations are under pressure to constantly scale and do more with less. Applications double every four years, data volumes double every eighteen months, and OpEx doubles every eight years. Yet IT budgets and headcount for data center operations rarely increase by more than single-digit percentages each year.

In order to scale the data center further, organizations should ideally try to achieve automation wherever possible—not only where “low-hanging fruit” exists, but where automation can foster more OpEx reduction and help accomplish longer-term goals. These goals can include the consumption of modern IT models around cloud adoption, SDN migration, and the software-defined data center.

In looking at BIG-IP LTM, the potential for automation is vast. Yet obstacles often exist to achieving automation, given the manually-configured state of dozens (if not hundreds) of discrete BIG-IP LTM devices. This is opposed to a more desirable state of devices—programmable “code artifacts,” where device configurations can be streamlined, templated, and automated.

The F5 BIG-IP LTM Automation Service

The BIG-IP LTM Automation Service enables organizations to automate BIG-IP LTM deployments and maintain existing ones. It first examines the existing BIG-IP LTM device configurations and then converts them to an iApp template for automation. This allows for the automation of future application deployments as well as that of routine device management for legacy BIG-IP LTM devices, which leads to significant time savings.

With automation in place, organizations can then move forward with additional productivity gains and further OpEx reduction—surrounding cloud and SDN migration, and the buildup of a service catalog using the customer’s tool of choice. Tools can include F5 iWorkflow™—a multi-tenant platform that speeds the deployment of applications and services into any environment.

Tasks Included in the BIG-IP LTM Automation Service

The BIG-IP LTM Automation Service is divided into three primary task areas performed by an F5 consultant. It provides customer-specified configuration of the iApp, demonstrates application service provisioning, and defines up to five operational and fully customized workflows.

Configuration of BIG-IP LTM Virtual Edition instances

An F5 Professional Services consultant will assist with configuring a standalone BIG-IP LTM Virtual Edition (VE) or HA pair of VEs in the customer’s chosen private or public cloud environment (e.g., AWS, Azure, or Google Cloud).

Configuration includes:

- Management interface setup
- VLAN and basic routing configuration
- Setting up an active/standby HA cluster in a single availability zone
- Licensing—bring your own license (BYOL)

In lieu of the configuration of a VE pair, a configuration may be performed on a standalone or HA pair of customer-provided BIG-IP LTM devices, with equivalent functionality.

Configuration of the iApp for service provisioning

The consultant will demonstrate the integration of the iApp to facilitate deployment of several customer applications from templates defined in the consultant's analysis, performed at the beginning of the BIG-IP LTM Automation Service.

Application deployment includes automated creation and/or modification of:

- Nodes
- Pools
- Profiles
- Virtual servers

Definition of customer operational workflows

The consultant will assist the customer in defining up to five workflows for operational management of the BIG-IP LTM environment. Tasks associated with the definition of these workflows include:

- Managing object status (enable/disable)
 - Nodes
 - Pools
 - Profiles
 - Virtual servers
- Controlling HA failover
- Configuration sync
- Configuration backups
- SSL certificate application

Learn More

For more information about the BIG-IP LTM Automation Service, use the search function on f5.com or contact consulting.sales@f5.com.

