Solution Brief
Fujitsu MicroApplications Practice

Automated, Precision Solutions for Networking Challenges

Operator Challenges:
Network operators are looking to transform their networks to increase efficiency and service agility. Traditional legacy applications are time-consuming to upgrade or modify, cannot scale across cloud environments, and require lengthy deployment times that cannot keep pace with demand. Failure to introduce customer experience improvements in a timely manner means losing competitive advantage.

Designed for speed, flexibility and scalability
Fujitsu created the MicroApplications Practice to help operators cost-effectively transform their software approach through flexible, automated applications built to address specific operator challenges. Fujitsu collaborates with each network provider to deliver microservice-based solutions tailored for their unique needs, applying a simple, consistent delivery mechanism, but without lengthy development times. By leveraging open technologies, the services and applications are portable within any customer environment.

A MicroApplication bridges the look and feel of a traditional software platform but focuses solely on the specific problem space. Rather than buying a monolithic platform, the customer has the flexibility to build software solutions as required and in a manageable timeframe, realizing the benefits of deploying a microservice-based architecture and open-source technologies.

Solution Highlights
- **Customer-centric** – MicroApplications leverage the executable intelligence and robust protocol support of the open-source Warrior framework to deliver solutions into a wide range of customer specific environments.
- **Cost-efficient** – The container-based microservice model provides an architecture for network operators to cost-efficiently scale and meet today’s escalating traffic demands. Operational costs are reduced through the automation of testing procedures, process flows and repetitive tasks.
- **Rapid ROI** – As a byproduct of faster development cycles and the targeted nature of MicroApplications customers can realize a faster time to market with revenue generating business services.
- **Multivendor Interoperability and Support** – REST APIs and microservice-based architectures provide the necessary layers of abstraction, to create vendor agnostic solutions as well as solutions that can be integrated into different customer environments.
- **No Lengthy Development Times** – A more flexible and seamless approach to application development enables shorter test cycles, more flexibility to change specific features and faster service delivery, enabling the network scalability and flexibility needed to keep pace with market demand.

Components:
- **Microservices: Single-Function Software Modules**
  Microservices are standalone, container-based single-function modules developed to solve provider challenges in rapid development cycles. Each service runs its own process and communicates typically through APIs. The services are developed, deployed, tested and scaled independently to optimize their performance. In some cases, a single microservice is sufficient to address a particular need. For other circumstances, a more robust MicroApplication is required.
- **MicroApplications – Pre-Packaged Accuracy**
  MicroApplications pre-package microservices, workflow automation and API integration into a customer ecosystem. MicroApplications also provide a user interface to address the functional custom behavior(s) required to administer the solution.
MicroApplications Architecture

Warrior Framework: Open Source Flexibility
The Warrior Framework, Fujitsu’s open source framework, enables the fast development and deployment of MicroApplications and microservices. It includes basic framework administration and configuration of applications. It also provides an extensive library of pre-developed scripts to facilitate development and a robust set of networking protocols that simplify multivendor integration.

A Full Range of Network Services
Fujitsu offers a full suite of services for MicroApplications, including design and build, multivendor integration, deployment, and maintenance and support, using a consultative approach to develop the use cases and define the requirements. After deployment, Fujitsu provides software configuration and lifecycle management services as well as technical support and NOC services.

Why Fujitsu
As a communications networking expert, Fujitsu is uniquely positioned to translate value-based networking use cases into targeted software applications. We harness the power of collaboration to deliver the most effective solution for each unique customer challenge, blending business expertise with the most advanced digital technologies.

Fujitsu solutions are based on the principles of automation, openness, scalability and interoperability – which translate to cost savings, faster services deployment and improved network performance for service providers.