

**PROFESSIONAL SERVICES  
END-USER EXPERIENCE ASSESSMENT  
STATEMENT OF WORK  
TO VERIZON PROFESSIONAL SERVICES SERVICE ATTACHMENT**

This Statement of Work (SOW) is entered into between the entities identified as, respectively, Verizon and Customer in the related Service Order Form (SOF).

1. **PROJECT DESCRIPTION.** Verizon’s End-user Experience Assessment service provides an assessment of the user experience by measuring and analyzing application performance data on up to four applications used by Customer in its business operations (Customer End-user Locations) (Project). Customers can choose from three types of End-user Experience Assessments: a one-time assessment of existing applications, a recurring assessment conducted each quarter (four times) in a calendar year and a simulation assessment that simulates a current application end-user experience on another application or at another physical location under consideration by Customer to provide a comparison between the existing end-user experience and the simulated end-user experience as a way to assist Customer in predicting the performance of the new application or physical location. The End-user Experience Assessment service consists of four components: Orientation and Requirements Gathering, Digital Agent Deployment, Measurement and Analysis, and Report and Review Session that include a one-time Report of existing applications, quarterly Reports of existing applications (four Reports total), or a Report that predicts the impact of an application or Customer End-user Location migration under consideration by Customer, as applicable.

1.1 **Level of Service.** End-user Experience Assessment has three levels of service - Small, Medium, and Large - and is determined by the number of physical Customer End-user Locations to be assessed:

End-user Experience Assessment Level of Service	Number of Customer End-user Locations
Small	Up to 13
Medium	14-25
Large	26-50

2. **SCOPE OF WORK**

2.1 **Orientation and Requirements Gathering.** Verizon and Customer will meet to collect and review Customer-provided information relevant to execution of the End-user Experience Assessment, such as physical architecture, network components, identification of known applications and business impact, identification of existing issues or areas for improvement, current network documentation, and current IP addressing plan. Verizon and Customer will identify and agree on (i) up to four Customer applications subject of the End-user Experience Assessment (Digital Targets); (ii) the list of Customer End-user Locations to be assessed; and, (iii) the list of Customer-selected laptops or personal computers at each Customer End-user Location to be used as host machines for the Digital Agents (Host Machines). Customer will provide Verizon with read-only access to Customer’s underlying network during the duration of the Project.

2.2 **Digital Agent Deployment.** Verizon will develop collection agents for the End-user Experience Assessment that will simulate production activities of the Digital Targets (Digital Agents). A minimum of two Digital Agents will be deployed at the Customer End-user Locations being assessed. Verizon will work with Customer to establish a deployment plan for the Digital Agents as follows:

- **Installation.** Verizon will supply Customer with an interface that will guide Customer through the process of Customer’s installation of the Digital Agents on Customer’s Digital Targets (Digital Agent Installation Agent). Verizon will also provide Customer with information regarding basic requirements for running the Digital Agent Installation Agent, such as necessary firewall ports to be opened, proxy settings, and call-home IP address.

- **Configuration.** Once successful installation of a Digital Agent is verified and Internet connectivity is established, the Digital Agent will call-home to a secure, cloud-based collector and analytics platform (Analytics Cloud) for configuration.
- **Troubleshooting.** Verizon will provide troubleshooting support if there is a failure of installation or failure of communication back to the Analytics Cloud.

2.3 **Measurement and Analysis.** Over a four week period (Assessment Period), the Digital Agents will collect and send IP address, local subnet, default gateway, and hostname of the Host Machine to the Analytics Cloud for an impairment analysis that will apply Analytic Parameters to the data collected. Data is collected when the Host Machine is static at the Customer End-user Location (non-roaming), powered-on and connected to the network infrastructure, and the domain user on the Host Machine is logged in. Digital Agents will be disabled from communicating with the Analytics Cloud at the end of the Assessment Period.

2.3.1 **Performance Measurements.** Digital Agents will collect and send performance measurements, which includes Ping Measurements, Diagnostic Measurements, and Application and Environmental Measurements as follows.

- **Ping Measurements.** Digital Agents will send ping (Transmission Control Protocol (TCP) or Internet Control Messaging Protocol (ICMP)) requests to their Digital Targets to obtain overall view of the network path between the Digital Agents and Digital Targets.
- **Diagnostic Measurements.** Digital Agents will perform a User Datagram Protocol (UDP) based traceroute to their Digital Targets to determine the network path. For each Internet Protocol (IP) hop in the path that responds to the traceroute, the Digital Agents make ICMP measurements.
- **Application and Environment Measurements.** Digital Agents perform a HTTP(S) GET request of a page hosted on the target server.

2.3.2. **Analytic Parameters.** Parameters are applied to the data collected in Analytics Cloud to analyze and score network and application behaviors. The type of Analytic Parameters applied will vary depending on the functions and features of the Digital Targets. Standard analytic types include: Interactive Web, Voice, Video Conferencing, Media (blend of voice and video), Video Streaming, Remote Desktop, File Sharing, Email, Domain Name System (DNS), and Citrix.

2.4 **Report and Review Session.** Verizon will develop and provide Customer with a Report and coordinate and conduct a review session with Customer to discuss the findings in the Report. Customers that select the one-time assessment will receive a Report that provides a one-time snapshot of the chosen application performance. Customers that select a quarterly assessment of the existing applications will receive Reports on a quarterly snapshot of the chosen application performance. Customers that select the simulation assessment will receive a Report that includes a prediction analysis of an application or physical location migration under consideration by Customer. The Reports will include the following application data points:

- Amount of time delay caused by any degrading end-user experience on the Digital Targets;
- Estimated cost of lost productivity on the Digital Targets; and
- Identification of current performance issues on the Digital Targets.

3. **DELIVERABLES.** In addition to the Report, Verizon will provide a Preliminary Report and Recommended Performance Improvement Report when the focus of the End-user Experience Assessment service is a one-time assessment or quarterly Reports. Verizon will provide the Preliminary Report and Recommended Performance Improvements Report to the Customer approximately 2 weeks into the Assessment Period. Verizon will complete another Measurement and Analysis after the performance improvements recommended are implemented by Customer and include those post-improvement application data points in the Report that is finalized and reviewed with Customer.

#### 4. **SUPPLEMENTAL TERMS**

4.1 **Project Initiation & Conclusion.** Verizon will initiate the Project with a kick-off meeting with the Customer to discuss and review the Project scope, set Project timelines, and identify the Customer background materials and access necessary for Verizon to perform the Project. Customer will designate a single point

of contact or management team to coordinate the Project activities with Verizon and ensure timely flow and exchange of information required for execution and completion of the Project within the agreed Project timelines. At the conclusion of the Project, Verizon will provide Customer with instructions for uninstalling the Digital Agents.

## 5. FINANCIAL TERMS

- 5.1 **Rates and Charges.** Customer will pay the End-user Experience Assessment Charges for the selected assessment type specified in the SOF.
- 5.2 **Travel Costs.** All Verizon activities and duties required under this SOW will be delivered remotely. Travel requested by Customer will be reviewed by Verizon, and any travel agreed on by Verizon and Customer will be billed separately at actual costs.