



Online Inventory Management Tools

Our electronic service management tools are designed to provide online access to your data, 24 hours a day, seven days a week, with key customer-to-carrier touch points and a wide choice of entry methods – from web-based desktop to system-to-system access through your own applications.

Online Service Management Tools: The Verizon Enterprise Center is a useful and environmentally-friendly online service management tool portal that helps you do business with us on your terms – when and where you need to. You can use the Center to place orders, view and pay invoices, create trouble tickets and analytical reports, and monitor and manage your communications services. The Center provides access to near real-time information so you can make informed decisions about your domestic and global networks.

Also, with Verizon Business and Verizon Wireless united on the same portal, large businesses and government agencies experience a seamless online experience with single sign-on to their information via the Center.

System Integration to Service Management Tools: eBonding services provide a seamless system-to-system connection that integrates your enterprise activities with our infrastructure benefiting you through automation that makes processes more efficient, allowing you to handle large numbers of transactions, and providing you with access to data right from your desktop.

Verizon Enterprise Center Dashboard

When it comes to managing the performance of your networks across the country or around the globe, you need quick data access. Verizon Enterprise Center Dashboard is our customizable, network monitoring tool that gives you a comprehensive view of your business landscape from the big picture down to the details.

Eligible Verizon Business voice, IP, and data customers can manage their network resources more efficiently through a single overview of network alarms, trouble ticket status updates, network availability trends, and scheduled network maintenance event notices.

You even can receive severe-weather advisories via the National Oceanic and Atmospheric Association (NOAA) right on your Dashboard to help you plan for contingencies. This feature provides continual updates and you also can zoom in on the map to view specific information for individual locations.

Fault Management

- Identify network concerns in a timely manner with timely network alarms
- Receive quick updates and navigate between your graphical network view and integrated repair functions with one click
- Analyze ticket trends and track Service Level Agreements (SLA) performance through powerful visual reports and drill-down capabilities



Performance Management

- Obtain data to make informed decisions via network utilization summaries
- Analyze network performance with comprehensive, auto-generated, and unique ad-hoc reports
- View SLA reporting and conformance trends

Configuration Management

- View your service and product topology with network inventory maps
- Receive scheduled maintenance event notices and impacted circuits/facilities information
- Receive timely updates and navigate between your graphical inventory view and integrated order functions in one click

Features

The Verizon Enterprise Center portal was designed for easy navigation and provides you with several important business functions to help streamline your business.

Feature	Description	Allows You To:
Orders	The Orders page is your one-stop shop for ordering and requesting service changes for many data and voice products.	<ul style="list-style-type: none"> ▪ Place online orders ▪ Request moves, adds, changes, and disconnects to your service ▪ Obtain account status and milestone reports ▪ Download recent orders summary
Invoices	Through the Invoices homepage you can view, analyze, and pay invoices electronically.	<ul style="list-style-type: none"> ▪ Review current charges across many business products ▪ View past bills ▪ Make online payments, including a "pay now" option ▪ Customize daily call records to monitor, trend, and analyze usage
Repairs	The online Repairs application gives you the flexibility to self-manage your products and services from virtually anywhere, anytime, without making a phone call.	<ul style="list-style-type: none"> ▪ Create, view, and update trouble tickets for voice, data, IP VPN, and Internet services ▪ Self-test your circuits without calling your service center ▪ View open ticket status activities to stay informed of progress ▪ View ticket history to monitor performance trends
Network Tools	The Network Tools homepage offers easy product management. With this tool you have the ability to provision, configure, and modify your voice and data networks, as well as administer	<ul style="list-style-type: none"> ▪ Connect to our state-of-the-art tools to help you run your business and call centers more effectively and efficiently ▪ Track lost calls and help improve call-



Feature	Description	Allows You To:
	Internet and e-mail accounts.	handling times <ul style="list-style-type: none">▪ Trouble shoot incomplete and blocked calls▪ Analyze data to help determine accurate staffing levels▪ Right-size your network▪ Pinpoint critical information quickly and efficiently▪ Balance heavy, toll-free traffic loads▪ Preset routing plans for each toll-free number and modify options in a near real-time environment. Configure your routing now so it is ready to be implemented in the event of natural disasters, snowstorms, or even power outages.
Resources	The Resources page can help you understand your Verizon Business products better.	<ul style="list-style-type: none">▪ Get quick and easy access to up-to-date product information through our forms shortcuts or downloadable eFTP client▪ Find IP reference tools, service level agreements, IP domain tools, and general reference tools, including tariffs, USOC (Uniform Service Order Code) manuals, and product availability information

Support

Verizon Enterprise Center delivers customizable business lifecycle, operations, and analytics support for your enterprise needs.

Business Lifecycle Support

Verizon Enterprise Center makes an eBusiness solution possible that will provide support throughout your business lifecycle. These tools extend beyond network management to include customer premises equipment (CPE), orders, billing, and inventory, to name a few.

- Network management
- Order entry and tracking
- Billing – view and payment
- Entitlement management
- Inventory visibility

Operational Support

To give you better command and control of your business operations, our operational support tools allow you to monitor your network, self-test circuits, and — for some applications — eBond your systems to ours.



- Network performance monitoring
- On-demand network and bandwidth control
- Network self-test capabilities
- Direct bonding

Analytical Support

Diagnostics can offer insights you need to understand your business better. Our analytical support provides tools to evaluate performance, customize bill reports, use forecasting models, and more.

- Link performance to Service Level Agreements
- Contract renewals
- Customized billing reports
- Forecasting and modeling tools - including "What if?" analysis

eBonding

eBonding is a system-to-system interface that enables true end-to-end business process integration between a customer's internal applications and Verizon's back-office systems for issue, asset, order, and network management.

eBonding is primarily for customers with a high volume of tickets and orders per month that would gain the most operational efficiencies from fully automating their business transactions with Verizon.

eBonding services currently supported include:

- Incident Management
- Circuit Testing
- Network Alarms
- Maintenance Advisories
- Order Management
- Inventory Reporting

Customers can select eBonding options from this list tailored to meet their distinct business needs and available resources.

eBonding for Incident Management

eBonding for Incident Management provides for automated trouble ticket case exchange between a customer's help desk application and Verizon.

Feature	Description	Benefit
Customer has the choice of messaging implementation: either two-way ("push/pull")	Two-way proactive publishing means the customer and Verizon update each other's systems in	Network efficiencies <ul style="list-style-type: none"> ▪ Improves total time-to-repair



Feature	Description	Benefit
publishing or one-way ("pull") customer initiated messaging.	<p>near real-time.</p> <p>With two-way communications:</p> <ul style="list-style-type: none"> ▪ Customers can submit create ticket or update ticket requests as needed with near real time responses from eBonding. ▪ Tickets initiated in a Verizon system can automatically create an incident in the customer's internal application. ▪ Verizon automatically sends the customer all updates on Verizon trouble tickets whenever an event occurs on a ticket. <p>One-way publishing is a communications mechanism where the customer initiates all sessions including requests for trouble ticket information updates.</p> <ul style="list-style-type: none"> ▪ One-way communications may be easier to implement for customers building their own basic application interface, but does not provide for event driven, proactive publishing from Verizon. 	<p>(TTR) by reducing the time it takes to refer a ticket from the customer's system to the Verizon system and by providing immediate visibility to ticket state and status.</p> <ul style="list-style-type: none"> ▪ Users can make better support decisions and respond to task requests more quickly. <p>Labor efficiencies</p> <ul style="list-style-type: none"> ▪ Eliminate swivel chair ▪ Eliminate duplicate data entry ▪ Reduced trouble ticket reworks and requests for clarification <p>Greater visibility</p> <ul style="list-style-type: none"> ▪ Visibility into trouble ticket activity detail allow customers to create their own analysis and reports for greater accountability
Proactive or Verizon-initiated transactions via two-way communications.	<p>New tickets are published to the customer's help desk immediately after ticket creation.</p> <p>Updates to an existing eBonded ticket will be reflected in the customer's help desk ticket in near real time. For example, Verizon lets the customer know when the incident is on maintenance time, resolved or closed.</p>	<p>Customer has immediate visibility into new incidents and the status of existing issues with their Verizon services.</p>
Reactive or Customer-initiated transactions.	<ul style="list-style-type: none"> ▪ Create a trouble ticket ▪ Modify a trouble ticket ▪ Retrieve trouble ticket detail and updates ▪ Cancel or close a trouble ticket ▪ Add comments ▪ Request trouble ticket status (for single ticket or all tickets in a 	<p>Customer communicates incidents and activities associated with those incidents directly from their help desk to the Verizon engineers in near real time.</p>



Feature	Description	Benefit
	<p>specified time frame)</p> <ul style="list-style-type: none"> Request escalation of a trouble ticket Request to reopen a trouble ticket Request to monitor an incident 	
Single interface for all incidents.	<ul style="list-style-type: none"> Ability to open an incident on any service with Verizon, including local, long distance, data, internet and managed services via the same interface 	<p>Resource efficiencies.</p> <ul style="list-style-type: none"> It is more cost-effective to build one vs. multiple interfaces into Verizon <p>Ease of use.</p> <ul style="list-style-type: none"> Customer uses the same process and forms to open an incident across their portfolio of Verizon services

eBonding for Circuit Testing

eBonding for Circuit Testing provides for customer initiated automated testing of circuits with integration to trouble management services.

Feature	Description	Benefit
Ability to perform an inventory search based on flexible search criteria	<ul style="list-style-type: none"> Query by geographic location Query by circuit characteristics 	<p>Labor efficiencies</p> <ul style="list-style-type: none"> Eliminate swivel chair Relieves customer from having to wait for inventory information from Verizon.
Circuit Topology Research is performed before beginning a test	<ul style="list-style-type: none"> Circuit characteristics provided DXC Alarm errors DXC Performance errors DXC Configuration/Cross-connect errors Current fiber outage that may be impacting this circuit Current tickets associated with this circuit Status if circuit is currently under Test or Monitor with Verizon Quick Port Monitor for Frame Circuits 	<p>Greater visibility</p> <ul style="list-style-type: none"> Greater visibility into circuit topology and configuration offers the opportunity for improved business operations.
Circuit Monitor	<ul style="list-style-type: none"> Monitors live data activity 	Simplified customer workflow



Feature	Description	Benefit
Test	<ul style="list-style-type: none"> Specify monitor duration Check the status of the test High level analysis of results Proactive action taken on failed test results 	<ul style="list-style-type: none"> Circuit testing allows the customer to investigate the fitness of a circuit without opening a trouble ticket.
Circuit Test	<ul style="list-style-type: none"> Intrusive test that takes circuit down for least duration Automatically opens a Priority 1 ticket in ETMS and enters test results in the ticket for failed tests when an outage is detected and there are no open Priority 1 tickets opened against that circuit. 	<p>Network efficiencies</p> <ul style="list-style-type: none"> Improved time-to-repair by proactively and more efficiently identifying and reporting network troubles to Verizon. Greater network availability resulting from improved time-to-repair represents real user productivity gains to the customer. <p>Greater visibility</p> <ul style="list-style-type: none"> Greater visibility into circuit issues will allow the customer to assign tickets to the appropriate trouble resolution group more effectively. Test results can be stored offline for benchmarking and analysis reporting for improved network planning.

eBonding for Network Alarms

eBonding for Network Alarms delivers circuit, switch and managed device alarms and alarm milestones in near real-time directly to the customer's network management tool. Through this service customers will benefit from network alarm and trouble ticket correlation capabilities available through the award winning Verizon Integrated Management Platform for Advanced Communications Technologies (IMPACT).

Feature	Description	Benefit
One-way, "push" interface	Transactions are initiated by Verizon	Verizon Enhanced Visibility
Publish New Alarms and Alarm Milestones	Verizon will proactively publish new alarms and alarm status changes/milestones updates, from highest severity to a clear state, to the customer's network management tool in near real time	<ul style="list-style-type: none"> Near real-time visibility into network health and operational status Monitor network events as they are worked.
Alarm and Ticket Correlation	Receive details of the trouble tickets associated with network alarms. This includes automated and manual tickets.	Operational Efficiencies
Alarm Properties	Detailed alarm properties attributes for each individual alarm condition for trouble shooting information purposes. Information provided	<ul style="list-style-type: none"> Reduction in customer time spent monitoring network <p>Improved customer</p>



Feature	Description	Benefit
Attributes Detail	includes: <ul style="list-style-type: none"> ▪ Alarm ID ▪ Alarm Severity ▪ Alarm Date/Time ▪ Ticket ID ▪ Location (A/Z) ▪ Service Type ▪ Circuit ID ▪ Equipment Type ▪ Device ID ▪ Alarm Status 	experience <ul style="list-style-type: none"> ▪ Customer leverages existing application(s) to monitor the operational status of Verizon services

eBonding for Maintenance Advisories

eBonding for Maintenance Advisories allows customers to query Verizon's MASTARS (Maintenance Activity Scheduling Tracking and Reporting System) database for maintenance events that might impact their Verizon services. Verizon can also proactively publish maintenance event details to the customer's help desk or network management system.

Feature	Description	Benefit
Customer has the choice of messaging implementation: either two-way ("push/pull") publishing or one-way ("pull") customer initiated messaging.	<p>With two-way communications customers can query MASTARS for maintenance events that impact their Verizon services and Verizon can proactively publish these events to the customer's help desk or network management application.</p> <p>One-way publishing is a communications mechanism where the customer initiates all sessions. In this case they would initiate the MASTARS queries.</p> <p>One-way communications may be easier to implement for customers building their own basic application interface, but does not provide for event driven, proactive publishing from Verizon.</p>	Flexibility of integration <ul style="list-style-type: none"> ▪ Verizon offers multiple implementation options to accommodate the customer's resource availability and requirements.
Search Maintenance Requests	Customers can query MASTARS for a list of events by: <ul style="list-style-type: none"> ▪ Impacted Equipment ID (ex: Circuit ID) ▪ Maintenance Start / Stop Time ▪ Status (WA: Waiting for approval, P: 	Improved customer experience <ul style="list-style-type: none"> ▪ Customer leverages existing application(s) to view and manage the availability of Verizon



Feature	Description	Benefit
	<p>Pending, D: Denied, C: Canceled, A: Approved)</p> <p>MASTARS returns the following set of attributes:</p> <ul style="list-style-type: none"> ▪ MASTARS Request # ▪ Request Creation Date ▪ Status ▪ Agent Reference Number ▪ Maintenance Date from / to 	services
View Maintenance Requests	<p>Customer queries MASTARS by Request number for the details associated with a maintenance event.</p> <p>MASTARS returns the following attributes:</p> <ul style="list-style-type: none"> ▪ Request type: Low / High Risk Work or Demand Work indicator ▪ Ticket reference number ▪ Company name ▪ Work description ▪ Location of Work: (Country, City, State) ▪ Event list <ul style="list-style-type: none"> - Event Code - Start / Stop Date/Time - Item list <ul style="list-style-type: none"> Item type: Circuit or Equipment Item ID: Network element identifier. Impact Type: Hits, Potentially or Outage) Number of outages Outage Duration Duration unit: (minutes, seconds, milliseconds) ▪ Contact information 	
Receive Maintenance Requests	MASTARS identifies an event that impacts the entitled customer and proactively pushes the details to the	<p>Enhanced Visibility</p> <ul style="list-style-type: none"> ▪ Customers will be able



Feature	Description	Benefit
	<p>customer's application.</p> <p>Attributes provided include:</p> <ul style="list-style-type: none"> ▪ Request ID ▪ Subject ▪ Agent POC Name ▪ Notification Type (Approval, Cancel, Reschedule) ▪ Event list <ul style="list-style-type: none"> - Event ID - Event Date From / To - Duration - Circuit List <ul style="list-style-type: none"> Circuit ID ▪ Maintenance Location ▪ Send Date ▪ Notification ID ▪ Full Message 	<p>to manage their networks more effectively with advanced knowledge of service-impacting maintenance events</p>

eBonding for Order Management

Order Management allows customers to electronically submit service requests and obtain detailed service order status reports for a wide range of products.

Feature	Description	Benefit
Ability to submit orders for new service requests	<p>Customer systems may submit orders requesting new Voice, Data and Internet services as well as CPE.</p> <p>Service features include:</p> <ul style="list-style-type: none"> ▪ Create order for new service request <ul style="list-style-type: none"> - Support for more than 70 services in the Verizon product portfolio ▪ Get Product List to see what products are supported ▪ Address Validation 	<p>Labor efficiencies</p> <ul style="list-style-type: none"> ▪ Eliminates re-keying ▪ Avoids "swivel chair" and faxes or e-mails ▪ Immediate notification of issues <p>Simplified workflow</p> <ul style="list-style-type: none"> ▪ Leverages existing application interfaces and databases
Request order status details	<p>Provides customer with current state and status of the service request including:</p> <p>Milestones – These are the key activities which describe the movement of an order to</p>	<ul style="list-style-type: none"> ▪ Automates messaging exchange <p>Great visibility</p>



Feature	Description	Benefit
	<p>completion including loop installation date, service activation, billing start date, and much more.</p> <p>Jeopardies – These are alerts to conditions that may prevent an order from being fulfilled such as incomplete order, incorrect billing information, missing contract information, and much more.</p> <p>Order Attributes – These include customer billing information, order, product name, order tracking number, order status, and much more.</p>	<ul style="list-style-type: none"> Customer will have direct access to the most up to date order status information for improved asset management.
Submit MACD order types (moves, adds, changes, deletes)	Customers may update existing services including moves, adds (i.e., more circuits to an existing trunk), changes and deletes.	
Modify order requests	Customer may Supplement Order to allow changes to previously submitted requests or Cancel Order to withdraw the request	

eBonding for Inventory Reporting

Feature	Description	Benefit
Provides the ability to request detailed circuit, card, access configuration, PVC configuration, switched voice, Internet services, managed services, toll-free, and CPE inventory information based on flexible search criteria.	<p>Search criteria</p> <ul style="list-style-type: none"> Query by customer identifier such as NASP ID Query by product Query by geographic location Query by circuit ID Query by circuit status <p>Details provided</p> <ul style="list-style-type: none"> Account and billing information (account number, billing number, BTN, account contact) Location information (name, street, city, state, zip, country) Product Information 	<p>Network efficiencies</p> <ul style="list-style-type: none"> Greater visibility into detailed inventory information will allow the customer to make better informed capacity planning decisions. A better understanding of network topology and circuit configuration leads to improved business operations. <p>Labor efficiencies</p> <ul style="list-style-type: none"> Relieves customers from having to wait to receive inventory reports from the account team. <p>Great visibility</p> <ul style="list-style-type: none"> Greater visibility into timely and accurate inventory information facilitates the



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ATTACHMENT F-15 TO EXHIBIT F
ONGOING INVENTORY MANAGEMENT PLAN
FINAL VERSION

Feature	Description	Benefit
	(product type, speed, status)	customer's ability to perform billing reconciliation.