UNIVERGE 3C™
UNIVERGE 3C is a complete, software-based unified communications and collaboration solution that redefines the way you communicate – enables anywhere, anytime access, operates across premise, cloud or hybrid environments and ensures business continuity through a single application platform.

**At a Glance**

- A powerful, all-in-one software-based unified communications (UC) and collaboration solution
- Operates across premise, cloud or hybrid environments with virtualized support
- Offers a complete suite of user-centric UC applications
- Enables anywhere, anytime access for increased efficiency and productivity
- Provides a consistent user experience across multiple devices
- Supports call control and UC features for mobile and remote workers
- Provides 911 capabilities for quick response to emergencies
- Offers a comprehensive set of management tools for easy administration
- Provides a highly reliable architecture to ensure business continuity in mission-critical environments
- Integrates communications into business processes to achieve advanced, customized business solutions
- Utilizes open, standards-based components to enable interoperability and reduce overall costs
- Offers investment protection through a simplified single application platform upgrade process; keeping all built-in 3C functions (IP-PBX, unified messaging (UM), UC, etc...) current as well as provides additional value through new features and capabilities
Overview

Today's economic environment is a challenge for businesses of all sizes and to stay competitive, they need to have the right tools that enable them to do more with less without compromising customer service. They must find ways to be more efficient, yet at the same time, remain flexible and reduce the overall cost of doing business.

With the right communications solution, a business can make a huge impact to their bottom-line and to individual productivity. By implementing UNIVERGE 3C, a single software application platform that delivers a fully functional IP-PBX along with a complete set of voice features and sophisticated unified communications (UC) and collaboration applications, a business can decrease overall expenditures while improving individual productivity, responsiveness and accessibility – truly empowering their workforce.

NEC’s UNIVERGE 3C redefines the way a business and individuals communicate. This comprehensive solution provides you with the necessary agility for today’s ever-changing work environment. It enables you to tailor your communications to your specific business needs plus have total control over how, when and where you choose to be reached. With UNIVERGE 3C, you can leverage its unmatched flexibility, reliability and scalability to keep your organization competitive in today's marketplace.

Solution

A Comprehensive, Software-Based Unified Communications and Collaboration Solution

Flexibility is a key attribute of NEC’s UNIVERGE 3C. As a single software application which operates across premise, cloud or hybrid environments, it delivers a complete communications solution that can be tailored to any organization’s needs for highly reliable and secure services.

This single software application platform provides you with an IP-PBX, voice features, Voicemail (VM), Unified Messaging (UM), Unified Communications (UC), collaboration tools, mobility options, voice/video/web conferencing, basic ACD, system-wide call recording, SIP services, business continuity, disaster recovery, a Services-Oriented Architecture (SOA) with web services support along with comprehensive management tools to administer it all. These core capabilities are all part of the basic feature set and not individual parts that need to be purchased and licensed separately – providing you with a complete solution and making the UC experience easier for you to achieve.

UNIVERGE 3C is unique because as a standards-based solution, it can run on general purpose servers of your choice alongside other mission-critical applications on your network as well as run on any existing network infrastructure.

UNIVERGE 3C offers:

- A wide range of certified IP client devices, enabling end users multiple options to adapt to their business needs
- An integrated UC client for multiple forms of communication including voice, video and web collaboration
- Costs savings - by eliminating the need for dedicated proprietary voice switches
- Virtualization support (Hyper-V and VMWare) which reduces hardware and energy consumption to align with a company’s green initiatives
- Analog, SIP, T1 or PRI trunking support
- Support for a variety of client operating systems (including Apple® Mac®, Microsoft® Windows® and Android™)
- Government and other security-conscious sectors robust reliability with stringent security features passing JITC (Joint Interoperability Test Command) certifications in compliance with the U.S. Department of Defense (DoD) and the Defense Information Systems Agency (DISA) standards.

UC Client provides easy access to and management of all your communications
Additionally, UNIVERGE 3C offers multiple media gateway options for PSTN connectivity and legacy analog and digital PBX connections, ensuring a migration path and protection of existing investments.

**Anywhere, Anytime Access for Increased Efficiency and Productivity**

UNIVERGE 3C helps your business streamline communications and information delivery. Through its integration of multiple media types and devices, productivity gains and efficiencies are created. Users do not have to go from one application to another or from one device to another. It provides users with intuitive communication management tools and quick access to the information that they need.

The comprehensive set of user-centric communication and collaboration features that UNIVERGE 3C delivers are integrated into a single robust UC Client and are easy to learn and use. Capabilities include the following:

- **Rich Presence** allows users to locate and identify another user’s availability and contact them on their preferred device.
- **Scheduled-Based Presence and Availability** enables users to route calls to the most appropriate telephone – desk, mobile or home office – based on their schedule or specific rule they have set.
- **Unified Messaging** enables instant access to email and voicemail messages from one inbox - messages can be retrieved from any location, using a desk phone, computer or mobile device.
- **Single Number/Single Mailbox Access** saves users time by allowing them to combine mobile and office phone messages into a single mailbox, have a single phone number to distribute to customers and colleagues and transfer calls from their desk phone to their mobile device without interruption.

**Microsoft® Office Outlook® Integration** synchronizes meeting calendars, journaling and contact groups into user call functions along with unified messaging functionality.

**Audio Conferencing** enables users to easily set-up three-party conferences quickly.

**Desktop Video Conferencing** allows users to send, receive and manage video conferences (includes three-way video conferencing and integration into third party video devices i.e. conference video, tele-presence, desktop video terminals).

**Instant Messaging/Chat** provides a communications alternative that is less-intrusive than phone or video conferencing and enables the quick exchange of information.

**Softphone** functionality allows employees to use their computers to send/receive calls, perform desktop video conferencing, and use advanced call forwarding and web-browser dialing.
• Comprehensive voice, video and web collaboration - equips your employees with the tools they need to help them improve efficiency, lower spending by reducing the need for travel and stay informed. It enables:
  - Quick and easy access to meetings from multiple devices and applications – your desktop UC Client, Outlook calendar, iPads®, Android tablets, instant messaging/chat window plus more
  - Multiple-party video display, presentation/file sharing, white-boarding and remote controls
  - Users to select from multiple language and time zone choices

• Online Smart Directories provide a desktop view of all extensions and availability within the enterprise.

• Point-and-Click/Drag-and-Drop Call Management allows users to perform most call functions directly from the desktop.

• Create Customized Automated IVR Messaging to enable callers to go through menu trees using Dual Tone Multiple Frequencies (DTMF) to get information – speeding up processes and saving money.

• Automated Attendant provides reliable 24x7 call routing which allows callers to reach the appropriate person using speech interface or DTMF - freeing up resources to work on other projects.

• State-of-the Art Speech Recognition provides users with an intuitive speech interface that easily allows them, through simple voice commands, to manage their calendar and contacts, dial contacts by stating their name, and perform hands-free call transfer plus more. (Optional)

• Interactive Call Screening offers users a virtual personal assistant which announces the caller and lets users choose to accept, acknowledge or transfer the call. (Optional)

• Call Recording can be accomplished either on-demand or using preset automation. Recordings can be saved to a local directory or automatically placed on remote resources [servers and/or Storage Area Networks (SANs)], for greater control. (Optional)

• Plus much more...

UNIVERGE 3C also integrates with Microsoft® Exchange® and Active Directory® to provide a powerful, fully-featured unified communications and collaboration solution for enhanced efficiency and productivity. This functionality is included at no charge and is bundled within the voice license. In addition, a complete software development kit (SDK) is available at no charge for third-party product integrations.
Support for Mobile and Remote Workers

UNIVERGE 3C offers enhanced user mobility solutions to enable your workers to stay connected and productive from any location.

- UNIVERGE 3C’s softphone is an invaluable endpoint option for mobile and remote users and offers them many of the same features they have come to expect from their desktop phone. It turns a networked PC into a virtual business telephone, which allows travelers and telecommuters to take their phone extensions with them to other locations. It works remotely without a Virtual Private Network (VPN) to enable users to work from any location. It also can be used as an alternative for a desktop phone.

- The UC Client works on a wide variety of mobile devices, tablets and laptops, to provide universal services access to all of its productivity-enhancing features from any location at any time. Apple, Windows and Android operating systems are supported.

- Call twinning is supported to help extend a user’s reach without having to set extensive call forwarding rules. A user, through the UC client, can easily configure their phone to ring one or multiple devices at the same time, including mobile and wireless devices.

- Works with NEC’s fixed mobile convergence uMobility™ solution to provide seamless roaming on and off campus – calls can be transparently bridged from your business’s Wi-Fi to cellular networks and back again via a Smartphone. (Optional)

- Wireless LAN and IP DECT terminals are supported on UNIVERGE 3C as IP clients on the system for in-building roaming capabilities to ensure that important calls are never missed.

Built-In 911 for Quick Response to Emergencies

Providing a safe environment is one of a business’s most important responsibilities. One of the first steps in the process to keep people safe and secure during an emergency is to provide a 911 system that alerts appropriate emergency response resources.

With UNIVERGE 3C, you will have the tools necessary to care for your most valuable asset – your people. UNIVERGE 3C’s 911 feature passes the Caller ID information along to the Public Safety Answering Point (PSAP). This reliable, automatic transfer of information helps you provide vital, lifesaving information to the 911 public safety network while notifying your appropriate on-site personnel that an emergency call is in progress; resulting in an immediate response.

In addition, your on-site personnel have the capability to silently monitor a call in progress and even barge-in on a call if necessary. Call Recording can also be used to capture a permanent record of the emergency event for future review. UNIVERGE 3C’s 911 support is automatically provided at no additional charge.

Comprehensive Set of Multi-Privilege System Management Tools

UNIVERGE 3C provides a comprehensive set of tools to help manage, maintain and monitor your organization’s system. It includes an easy-to-use GUI (client or web) that supports a wide range of capabilities. Different privileges can be set for administrators and moves, adds and changes can easily be done via a web-browser. Flexible number planning, call accounting, rights-based security, and Class-of-Service profiles are just some of its extensive feature set. Also included in UNIVERGE 3C is a powerful reporting tool that analyzes call performance, tracks call volume and monitors resource usage.
UNIVERGE 3C supports many features in a single integrated software application while other vendors’ solutions frequently require multiple external servers.

UNIVERGE 3C’s integrated features include: music on hold, announcements, multi-lingual auto attendant, voice-mail, unified messaging, email, voice/video conferencing, rich presence, text messaging and call recording.

Unmatched Reliability and Security to Mitigate Risks

NEC understands the mission-critical nature of all your communications services. If your communications are down – your business shuts down! By choosing UNIVERGE 3C, you are choosing a communications platform that delivers continuous high availability and disaster recovery with unmatched security, scalability, interoperability and reliability.

UNIVERGE 3C, as part of an open, mission-critical communications infrastructure, is a distributed software application that can operate on centralized or remote networked servers, with no one server acting as a single point of failure. (There is no charge to run an additional instance of UNIVERGE 3C on a dedicated or virtual server.) This provides an organization with redundancy and reliability in the event of network outages. This also minimizes hardware costs because shared processing and load balancing provides maximum system availability, enabling one 3C system to support up to 30,000 ports.

Security and risk mitigation are top-of-mind in most organizations. UNIVERGE 3C provides you with the latest encryption and security protocols that are available today. With HTTPS connectivity for UC Clients and SIP connectivity that includes SRTP and TLS standard security protocols, you can be assured that your communications and conversations are secure.

UNIVERGE 3C takes security even a step further by meeting the stringent security requirements of the United States Department of Defense (DoD). UNIVERGE 3C has received Joint Interoperability Test Command (JITC) certification and meets the DoD’s strict security, compliance and regulatory requirements. The JITC certification also means that UNIVERGE 3C meets critical interoperability requirements and achieves five nines (99.999%) reliability.

Business and Communications Integration with Web Services

UNIVERGE 3C allows companies to integrate enterprise communications with complex business systems to achieve advanced, customized business solutions. With the introduction of open, standards-based components, UNIVERGE 3C becomes an enterprise communications system used by various business applications to integrate communications into many business processes.

Web services support an open architecture that allows multiple devices to communicate and co-exist for fast, flexible, and repeatable application development and integration. Through standards-based XML and SOAP technology, UNIVERGE 3C becomes an integral part of business applications providing notifications, requests and information dissemination for quicker responses to key processes. Web services align with the concepts of a service-oriented architecture (SOA) and Communication Enabled Business Processes (CEBP), enabling enterprise applications to easily integrate communications functions into critical business processes.

One Software Application = Investment Protection + Cost Reductions

As a single comprehensive unified communications and collaboration application, UNIVERGE 3C provides all of the functionality and services that your organization needs. It alleviates the need for multiple vendors, servers and applications and the issues that are inherent with integrating everything into a seamless solution. It simplifies your experience by reducing complexity and costs.
Specifications

Minimum System Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Minimum System Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System</td>
<td>Windows® 2008 Server R2</td>
</tr>
<tr>
<td>Additional Software</td>
<td>Java 2 Runtime Environment (Standard Edition) v.5 or higher</td>
</tr>
<tr>
<td>CPU</td>
<td>Intel Pentium 4, 2.4 GHz or higher (Core Duo and Quad Core, 2.8 recommended)</td>
</tr>
<tr>
<td>Memory</td>
<td>1024 MB SDRAM or higher (2048 recommended)</td>
</tr>
<tr>
<td>Ethernet</td>
<td>100 Mbps Ethernet recommended</td>
</tr>
<tr>
<td>System Speed</td>
<td>80 GB ATA HD or higher (250 GB recommended)</td>
</tr>
</tbody>
</table>

Additional Information

Protocols Supported

- SIP – RFC 2543 / 3261
- DHCP
- SIMPLE (Windows Messenger)
- TAPI 3.0
- DirectX 8.0
- XML
- TCP / IP / UDP
- FTP / TFTP
- SNMP
- RTP / RTCP
- SOAP

This single application also delivers all of this functionality through a single user license. This user license model immediately grants access to all of 3C’s high value features and capabilities without any hidden or additional costs. This approach allows for easy coordination of multiple devices (IP, video, conference, home or remote office phones and mobile devices) that are connected to any user. It enables a common set of features to be extended to any device – maximizing a user’s productivity.

Additionally, this dynamic software-based solution will forever be current and always provide you with compelling new features through simple software updates. Keeping your system current is a matter of simply upgrading one single platform that covers all the features, applications, and UC and collaboration services [Voicemail (VM), Unified Messaging (UM), collaboration tools, mobility solutions, voice/video/web conferencing, etc...] that are included in UNIVERGE 3C. It’s that easy! Also, with NEC’s Software Assurance program, you will receive technical assistance and software upgrades free of charge.

UNIVERGE 3C – the choice is easy! The flexibility and capabilities that it can bring to your organization are unmatched and its ability to grow with your business ensures that your investment is protected.