



PRODUCT  
BRIEF

## Integral Enterprise Edition 5



As a leading supplier of communication systems and services, Avaya designs, builds and manages communication networks for over one million companies worldwide. Our goal is to develop customized business communications, offering intelligent solutions to help you increase productivity and profitability. Which in turn allow you to focus on your core business concerns: growing your enterprise and enhancing your customer relationships.

### **Converged telephony software for companies**

Integral Enterprise Edition 5 is an integrated, high-performance solution designed by Avaya for converged business communications. The new software also allows the transition to the world of webbased communications with its manifold selection of fascinating tools.

Integral Enterprise Edition 5 is professional telephony software that uses the open Linux operating system as its reliable and future-proof basis for innovative applications. The optimized software is equipped with numerous new standard interfaces including the Session Initiation Protocol (SIP) and now offers even better performance and functionality for comfortable and efficient telephony. In addition to conventional ISDN, DECT and CTI functions, and the seamless integration of VoIP, the software can also be linked to existing IT environments without any problems, allowing even pure ISDN solutions to migrate to the world of IP. The rigorous use of internet protocols guarantees the perfect interaction with other server applications. Furthermore, Integral Enterprise Edition 5 offers the highest levels of scalability for the widest range of business structures: for deployment in small individual systems with less than 30 subscribers right up to major solutions for in excess of 100,000 users.

## **The basis for efficient business communications**

Work processes can be designed more simply and securely with Integral Enterprise Edition 5. Several hundred processes within your company; these support speed and flexibility in all areas, thus contributing directly to the reduction of costs and workload.

### **Increased productivity in your company**

Converged solutions result in increased productivity – at all levels of your company.

Manpower resources – from the boss to his assistant to complete teams – can work together even more efficiently across various locations and their capacity can be optimized in future. Frequent actions, such as searching for call numbers and the subsequent automatic dialing of the same, can be performed on all end appliances thanks to the LDAP compatible telephone directory. Manifold journal and call list functions in conjunction with the Avaya one-X™ Deskphone telephone sets and the SIP-Softphone. Avaya one-X™ Desktop Edition create the highest levels of telephony comfort as the basis for quicker, customer-friendly responses.

The cross-locational collaboration among teams is simplified by the conference call functions for up to 8 subscribers. In addition, Avaya offers advanced collaboration solutions tailored-made according to customers demand. These applications cover Audio, Video or high end Web-Conferencing solutions, everything will be possible.

### **Cost-efficient utilization of the widest range of networks**

The best possible choice of connection is managed through full functionality to the network operator and the cross-locational proprietary company networks. SIP-Trunks consolidate the complete way of communication on one common IP-infrastructure. Flexible routing techniques, such as Least Cost Routing (LCR) optimize call channels and help to reduce telephone charges.

## **Cost management made easy**

Integral Enterprise Edition 5 designed by Avaya offers you complete cost control and maximum transparency for your strategic decisions. The automatic selection of the lowest-cost provider helps to reduce call charges. The utilization of existing data networks for voice transmissions eliminates the need for costly landline connections within companies with branch office structures. The active support of central applications, such as telephone directories, Unified Messaging System (UMS) and system management, offers further opportunities to reduce the total cost of ownership (TCO). The telephone deployment of the field sales force offers further savings potential: Telephone calls made by individual employees can be channeled centrally and at low cost through the Communication Server Integral 55 LX at any time. Irrespective of whether the call is made from a conventional telephone, from home or a GSM end appliance, employees only need to identify themselves in order to use the centralized facilities.

Cost transparency is a further success factor in cost management. Integral Enterprise Edition 5 allows call charges to be captured in detail and on a project-specific basis, and made available for further processing or billing, whereby calls can, of course, be separated into private and business calls.

### **Increased accessibility heightens customer loyalty**

Integral Enterprise Edition 5 comprises numerous intelligent features to mobilize your company, whilst at the same time ensuring that you are still always accessible to your customers or business partners. Irrespective of whether you are in your office, somewhere else in the company, or out of the office on business, you can still be reached on the same number at all times. Calls don't get lost, and can be forwarded in line with your specifications, to your secretary or voice mail, for example. Outbound calls – even those that you don't conduct from your desk, but which are made from somewhere else in the company or outside the office – always display your familiar extension number: Making you easy to identify for the business partner you are calling.

### Heightened flexibility

Integral Enterprise Edition 5 offers a vast selection of functions and features that satisfy the highest demands for flexibility. Employees, for example, can always log on and off the telephone using their individual user profile at any time, even if they are sitting at different desks. Thanks to ISDN or IP telephones, relocations are simple and trouble-free. Personal settings can be taken over in their entirety at the new workplace – without any additional work involved in reconfiguring or changing the cabling.

### Maximum reliability and security

Security is a central issue for many companies. A wide range of security functions, such as locking numbers, authorization levels, allocation of PIN codes and intelligent routing in line with freely definable workflow criteria support the reliable and secure operation around the clock. After work hours the telephone can be automatically locked to prevent unauthorized usage.

### An investment in the future of each and every company

Thanks to its deployment of cutting-edge technology, the open software platform with its numerous standard interfaces, and the integration of web-based communication possibilities, Integral Enterprise Edition 5 represents a high-performing and secure investment in the future – for small, medium-sized and larger companies.

### IP convergence – the future of your communications

Many companies already have access to high-performance data connections between their various locations: IP-VPN and MPLS networks are spreading rapidly. Optimal prerequisites if you want to benefit from the full range of innovative VoIP features alongside ISDN and DECT functionality.

### Efficient VoIP networking

Standardized call number plans, comfortable features enabled by QSIG plus protocols, and the shared utilization of central facilities, such as Call/Contact Centers, Unified Messaging Systems (UMS) and switchboards, simplify processes within your company whilst at the same time reducing ongoing operating costs. At the same time, call charges can be reduced by using the existing capacities of the data connection.



### **Gentle migration to the new world**

Avaya enables you to progress to VoIP technology one step at a time: With your existing infrastructure being incorporated along the way to protect your investments. New applications or extensions are simple to realize using VoIP, whilst the transparency between ISDN and VoIP features is guaranteed at all times.

### **Comfortable and low-cost – Linking-in your branch offices**

More and more companies with widespread branch office structures can use existing data connections for voice transmissions as well, thus eliminating the need for local TC systems or leased exchange lines.

A further benefit for you and your staff: Features are available across all locations and support rapid decision-making and response processes.

### **High-performance mobile workplaces**

The growing number of home and mobile desks is proof of the trend towards heightened flexibility at the workplace: During peak periods Call/Contact Centers can switch in free agents. Sales agents can talk to head office whilst out in the field, and employees can perform some of their tasks from home.

Thanks to Integral Enterprise Edition 5 in conjunction with the Avaya one-X™ Deskphone telephone sets and the SIP-Softphone Avaya one-X™ Desktop Edition any imaginable desk configuration can be realized easily and at low cost. Your employees have access at all times to the same high-performance environment they are accustomed to at the office.

### **New mobility within companies**

Irrespective of whether you are in the vicinity of your desk, within the corporate network, at home or on the road: Integral Enterprise Edition 5 offers manifold innovative means and solutions for linking in mobile appliances.

### **Mobile within the network**

Continuous accessibility, toll-free internal calls and access to comfortable features – all made possible by a DECT radio cell network within the corporate network.



Optimal coverage is provided, from the smallest branch offices to major corporate locations with more than 1000 base stations and 5000 DECT telephones. Network-wide roaming across locational borders is made possible by the high performance network protocol QSIG plus over internet protocol. New options and features become possible across all locations: for example, the deployment of D3 or FC1 DECT telephones at all corporate locations, or individual user definition of accessibility profiles, or the simultaneous signaling of incoming calls on both the desk telephone and the DECT telephone. Converged wireless infrastructures, such as Wireless LAN (WLAN), are made possible using an innovative mobility solution comprising Mobility Server and WLAN end appliances: WLAN telephones or PDA Softphones. This enables the low cost utilization of an existing WLAN infrastructure for voice services, as well.

### Workplace mobility

In conjunction with the high-performance Avaya one-X™ Deskphone telephone sets, Integral Enterprise Edition 5 can also mobilize desk telephony. A cordless Bluetooth headset – an already familiar adaptation of GSM telephones – ensures freedom of movement, allowing the caller to make notes whilst at the same time conducting the call.

### More solutions – higher savings

Integral Enterprise Edition 5 actively supports the incorporation of GSM mobile telephones in business communications. The benefits:

- You can be reached at any time on the same number
- Calls can be transferred both internally and externally from a mobile phone
- Queries can be clarified quickly and efficiently, without the need to call back
- Telephone conference calls on a mobile phone are no longer a problem
- Cheaper mobile call charges from using lower-cost landline tariffs
- No extra SIM cards and, as such, no additional GSM basic charges.



## Higher flexibility for any environment

### Open standard interfaces

The open standard interfaces, such as SIP, CSTA, DSS1, QSIG, H.323, XML and many more, enable the simple and trouble-free integration in different environments. The SIP protocol is available in different modes; the integrated SIP client interface enables the connection of SIP phones and SIP soft phones. The SIP trunk interface supports the connection of application servers, e.g. UMS and the connection towards a SIP carrier.

Further standards, such as TAPI, JTAPI, TSAPI, can be mapped and industry-specific solutions linked in using complementary middleware products. The high-performance CTI interfaces ensure optimal implementation of your individual needs and requirements: From simple telephony from the Web Browser to the comfortable integration of applications in workgroup systems (MS Exchange, Lotus Notes) up to complex Call/Contact Center communications.

The CTI-interface is also useable for Unified Communications Solutions with Microsoft Office Communication Server 2007 (OCS 2007).

## Standard networking with QSIG

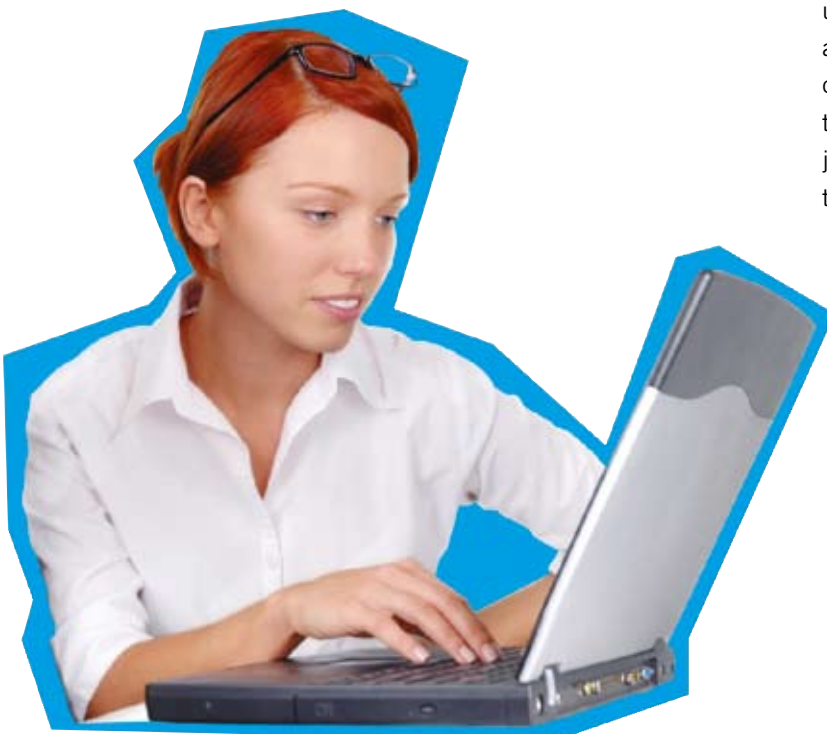
The QSIG standard enables communication systems from different vendors to be interconnected. Integral Enterprise Edition 5 designed by Avaya ensures that you have access to comprehensive QSIG functionality in line with the ISO standard. In addition there are powerful connectivity possibilities over ISDN or IP to the other Avaya platforms Communication Manager and IP Office. A standard-conform VoIP network link on a SIP-basis to other vendors is currently in preparation.

## Reliability and security – values that pay off

Integral Enterprise Edition 5 is a modular, scalable and highly available software system. Combined with the Media Gateways MG 100 and MG 1000 and the S 5500 Media Server it provides you with an all-round, self-contained suite for secure and future-proof business communications.

## The reliable basis for your business communications

A hardened Linux operating system forms an open platform guaranteeing the highest levels of operating security and constant availability. Only software components that are really needed for telephony applications are deployed. Only those ports and services that are urgently required for internal or external communication are made available by the system, or access is strictly denied. An integrated firewall monitors and protects the interface to the Local Area Network (LAN): in conjunction with numerous additional security measures this is the perfect protection against possible attacks.



### Manifold access protection

Communication efficiency and effectiveness also depend on quick and uncomplicated access to the required services and features – this applies both to normal employees and service personnel. To ensure this, Integral Enterprise Edition 5 uses a mature access protection system that can assign explicit rights to specific user groups, starting with comfort features, such as call forwarding for end users, and extending to include comprehensive administration rights for technical service. The relevant monitoring facility provides information about system accesses or amendments, and creates the prerequisites for conducting audits.

### Secure IP-Telephony

The software Integral Enterprise Edition 5 offers secure IP-Telephony by secure authentication according to H.235 and an encryption of the signaling and the payload with Advanced Encryption Standard (AES-128) a subset of the SRTP standard. By use of this all phone call between the IP phones are protected. Additional security functions like IEEE802.1X are provided by the Avaya one-X™ Deskphone telephone sets.

### State of the art technology for secure integration

In addition to authentication, the signaling and communication channels between the Integral Enterprise solution and the application and management servers are encrypted using the latest cutting-edge technologies, such as SSL and HTTPS, which are based on acknowledged standards and which guarantee extensive investment protection and sustainability into the future. Scalability and interoperability among the various applications are guaranteed at all times.

### Security according to plan

IT Security is absolutely essential for most companies. The German Federal Office for Information Security (Bundesamt für Sicherheit in der Informationstechnik, BSI) has published a manual on IT baseline protection, and these guidelines have become the standard for Avaya and IT security. The logical result: BSI certification for “IT Baseline Protection – Self-Declaration with Certification” and a series of solution certifications for well-known TC/IT service providers.



## Secure through and through

Security is also defined by the perfect interaction of all the components comprising a solution. In addition to general operating security, end users also particularly want the assurance that their individual settings and flexibility within a system are guaranteed. For this reason, Integral Enterprise Edition 5 is equipped with further security mechanisms to protect the interface “telephone” against unauthorized access. In addition to a telephone lock, which “locks or unlocks” Avaya one-X™ Desk-phone telephone sets at specific times, emergency call numbers can also be set up, as can a data back-up of personal settings and telephone directories. Certain call numbers can, of course, be blocked at overall company level or for individual subscribers at any time. All of these security measures ensure that the personal mobility of your staff is not restricted to any extent.

## Preconditions for Integral Enterprise Edition 5

- Integral Enterprise Media Gateways  
MG 100 or MG 1000 (with S5500 Media Server)
- Communication Server Integral 55 LX,  
Integral 55 Compact LX
- Avaya easy Management 5.2

## About Avaya

Avaya is a global leader in enterprise communications systems. The company provides unified communications, contact centers, and related services directly and through its channel partners to leading businesses and organizations around the world.

Enterprises of all sizes depend on Avaya for state-of-the-art communications that improve efficiency, collaboration, customer service and competitiveness. For more information please visit [www.avaya.com](http://www.avaya.com)

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