

# Seven key steps for identity management in a unified communications world



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In the modern workplace, more tools do not imply more effective communication. In practice, many employees fail to reach their colleagues on the first attempt, given the choice of channels and a lack of context around the most effective method of communication, based on a colleague's status.

It's no wonder then that many organisations worldwide are taking steps to unify their business communications channels with a view to improving their employees' productivity and reducing the delays and costs associated with business communications.

The beauty of unified communications lies in its ability to allow people to use the most appropriate communication medium for the task at hand and to switch or merge channels as required. To achieve this, organisations need to integrate systems, technologies and technology vendors to enable, for example, switching from e-mail to voice, or instant messaging to voice.

For unified communications to deliver on the productivity and cost reduction promise, it relies heavily on accurate and consistent contact information. Managing identity across these components can be tricky because they involve multiple vendors, and technology elements that are new to the network administrators – such as voice systems. Should organisations not adopt an integrated approach to identity management, they risk incurring high administrative costs, creating security loopholes and inhibiting a seamless unified communications experience.

In this document, we outline seven practical considerations to keep in mind when integrating identity across multiple systems.

## Step 1: Select and prepare the directory

It's not uncommon for organisations to maintain multiple directories. Every time a new technology is added to the communications mix, the number of directories that need to be maintained grows. Organisations often find themselves manually reconciling user moves, adds, changes and deletes (MACDs) between their IP telephony and directory systems. This manual process is time consuming and error prone. It is essential to select a single authoritative directory that will be maintained as a true source of contact details for each and every employee. This should include (at a minimum):

- Full name
- E-mail address
- Telephone extension(s)
- Facsimile
- Mobile
- Home
- Conference bridge
- Video
- SIP/Presence/IM address
- Physical location

Once selected, the directory needs to be prepared for schema extensions and accurate synchronisation. Ensure numbers are normalised into a standard format (E.164 is frequently used) and that users understand how to enter numbers in this format to their own personal contacts.

## Step 2: Prepare the PBX

IP telephony enables employees to use multiple communication channels such as voicemail and Microsoft® Outlook and provides remote users with the ability to retrieve messages when they are away from the office. In order to realise the value of certain of these features, IP telephony needs to be integrated with the organisation's existing directories and systems, such as Microsoft® Active Directory®.

The PBX may need configuration to accept the new numbering schema and interpret it correctly. Additionally, some form of computer telephony integration (CTI) interface is required to enable telephony presence and call control. This may be a software license, a hardware component or may even require a platform upgrade, depending on the PBX. In some cases, the CTI license is included.



Many people report using as many as **six different channels** and **five applications for communication each day**.

### Step 3: Integration into a broader provisioning scheme

The value of unified communications lies in the integration of previously separate communications channels into one seamless user experience. This is however also where the challenge lies. If technology vendors are to be believed, unified communications is “plug and play”.

The unfortunate truth is that in reality, no single vendor can today offer a complete suite of unified communications technologies to address all collaboration needs within an organisation. There are even fewer organisations that have standardised on a single vendor for all of their communication needs. This presents a need to integrate multiple vendor technologies across multiple platforms and architectures.

While many systems and applications have come to leverage existing directories (particularly Active Directory), the reality is that numerous directories will continue to exist for the foreseeable future. These directories will be tailored to support the specific applications they exist for – and so many details will vary from directory to directory. You need to be able to integrate these directories into a broader provisioning scheme.

To overcome these challenges, Dimension Data recommends looking at identity integration software – middleware that will broker and translate the various directory pieces across the systems. This integration software should be able to cover both the voice and data worlds and be simple yet extensible.

### Step 4: Bring together the right people and skills

Before the days of IP telephony, organisations typically employed a team to maintain their network identity, and a separate team to take responsibility for identity management on the PABX. This presented certain challenges as the telephony identities were managed separately from the network logon account.

IP telephony is a key building block for unified communications and requires a bridging of identity across the voice and data world, requiring resources with broad experience in multiple areas.

Multi-disciplinary people with experience in the data, voice and application space are difficult to attract and retain. They need to be tasked with work according to their levels of skill and experience. Transactional tasks like identity updates fail will to stimulate.

Dimension Data recommends implementing identity integration software that allows the view and management of identity across systems to be rationalised. This removes the need to have specialist skills to maintain this identity information for each application. It will free up skilled resources to work on business affecting projects, rather than areas that offer low value from an operational prospective.

### Step 5: Address risk and compliance

It's important to bear in mind that identity management plays a critical role in ensuring that organisations do not fall foul of regulatory acts such as Sarbanes-Oxley and Basel. Without a central directory with accurate information around roles and titles, organisations lack visibility and transparency into how employee access to corporate tools and information is regulated.

Ensuring that employees have appropriate levels of access to corporate resources, communication channels (i.e. long distance dialling) and that these services are timeously deactivated when an employee leaves the organisation are critical to containing risk.

Organisations need transparent and auditable processes that can consistently be applied across all systems to record an employee's access details. As this process is generally labour and time intensive, Dimension Data recommends approaching the process via rules and automation, to standardise how employees and access are segmented.

### Step 6: Ensure ongoing directory maintenance

If end users have to log in to multiple systems, or the authentication schemas are inconsistent between systems, then the unified experience is lost. Dimension Data often supports clients that have no schema in place to ensure that identity between their Microsoft® Active Directory and voice systems was kept in sync. As and when they roll out enterprise instant messaging systems and use the 'click to dial' functionality heavily this can become an issue. As people change names, locations and extensions; or leave the company, directories fall out of sync resulting in 'click to dial' functionality not working.

It follows, therefore, that without the right resources and a streamlined process to maintain disparate directories, you'll quickly lose the benefits you sought to gain from embarking on your unified communications journey. At the same time, the time and human effort required to update multiple directories often results in delays in provisioning new users with systems and tools they require to be productive.

Dimension Data recommends investing in tools that automate the process of creating accounts for new hires, changing access levels as employees change jobs, and eliminating accounts when employees leave the company. By automating these processes and systems, you'll become less reliant on specific individuals to keep communication up and running. In addition, human error is minimised and risk reduced.



## Step 7: Build organisational growth into the plan

It's not uncommon for organisations to look to solutions that address an immediate pain but have limited future application. As the workforce grows and more changes, even streamlined provisioning processes will struggle to cope with user requirements.

Dimension Data recommends organisations consider mainstream technology solutions that are well supported and do not rely on custom development and knowledge to scale with growing demands.

Ideally, a solution should include functionality like optional web – or form based user provisioning to streamline the process and web-based corporate directory look up as the organisational workforce swells.

Lastly, the solution should be easily incorporated into full user provisioning across the organisation to avoid duplication and error.

Dimension Data's IPAD Connector solution is a user-provisioning solution that streamlines the management of identities across voice and network environments. IPAD Connector simplifies the deployment and management of IP telephony by integrating user identities between Microsoft® Active Directory and Cisco Unified Communications Manager.

It acts as middleware between these two directories to ensure that both directories are consistent and up-to-date, by automatically provisioning users added to Microsoft® Active Directory in the Cisco Unified Communications Manager directory, with all necessary VoIP attributes added, changed or deleted.

## About The Author

**Peter Menadue** is the General Manager for Dimension Data's Microsoft Solutions business globally. In this role, he is responsible for the strategic direction of Dimension Data's Microsoft Solutions business. This includes solution development, sales, alliances and technology strategy. Peter has spent more than 20 years in the IT industry, working in both Australia and the US where he has focused in the Microsoft integration space.

Peter is knowledgeable and passionate about the IT industry, and enjoys considerable profile in the industry through his participation in events, press and presentations and a number of industry forums. He combines his technical background and commercial experience to ensure organisations he is involved with lead the market.

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