

# **DICENTIS Conference System**

## White Paper: DICENTIS



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#### 1 Summary

The DICENTIS conference system delivers world-class performance designed to last. Built on the OMNEO media networking architecture, DICENTIS integrates easily with other systems, features, and IT infrastructures, and the system will continue to evolve, as the open standards evolve. The result is a conference system of unmatched quality, longevity, security, and reliability.

#### 2 The Challenge:

#### **Deliver World-Class Performance in a Future-Proof System**

Today's top echelon of conference systems must offer superior quality backed by secure, uninterrupted connectivity.

From a small boardroom with ten conference devices, to a large international summit building, as new positions are added or meeting needs change, conference center IT managers should be able to mix and match devices and move them around freely.

Conference systems should also be future-proof and scalable, able to accommodate new devices and features, and integrate easily with third-party equipment, standard cables, and additional subsystems. Conference systems should offer the flexibility and scalability to be installed, maintained, adapted and expanded without incurring extra hassle and cost. In addition, it is imperative that conference systems function smoothly within the larger IT infrastructure.

Unfortunately, proprietary systems with unique platforms and security protocols require specialists for installation, adaptation, and maintenance. They often require additional interfaces to be able to interact with third-party equipment or features. Integration with other systems or subsystems can be challenging, expensive, and even impossible. The "security by obscurity" idea is also an illusion. A skilled security person can break the security easily, while an IT manager without specialized system knowledge cannot secure the system again. Finally, the entire system lifetime is limited by the proprietary platform, which does not evolve like an open-standard platform. An expensive, state-of-the-art system becomes obsolete within five years in today's world. Experience shows that there is no client benefit to a proprietary system.

In contrast, the best conference system today should provide a vast range of conference devices with first-class performance, based on open-platform media networking architecture and standard IP security protocols. The open architecture should allow the system to evolve into the future. It should also enable secure, uninterrupted connectivity between devices, as well as seamless interaction between the conference system and other equipment and systems. Integration with third party equipment and systems should be quick and easy, because with open-standard IP protocols, no vendor-specific knowledge is required, which leads to less dependencies on a single supplier and lower maintenance costs.

#### 3 Mastering the Challenge: DICENTIS

DICENTIS delivers world-class performance in a conference system designed to last indefinitely, and offering unprecedented ease of integration. DICENTIS is the most futureproof, secure, reliable, scalable, flexible, and cost-effective system of this caliber on the market today. How was this accomplished?

Services. Everything in the DICENTIS system is configured, managed and supervised by the DICENTIS Services. These services are running on the Windows Operating system which runs on standard available hardware. Instead of developing hardware with special software and firmware, DICENTIS is developed as services running on standard available hardware and standard operating systems which can be serviced by your IT department as part of their standard IT processes.

Standardization is the key. It is what makes DICENTIS perfect for any size professional conference network, from a single council meeting room, to an international conference center. Regardless of the number of devices connected or the size of the area covered, DICENTIS offers a world-class multimedia experience, with unparalleled future-proofing, security, reliability, scalability, flexibility and cost-effectiveness.

#### 4 Perfo

#### Performance

From 10 speakers to 10,000, in one room or in 100 different rooms, the system will provide a natural, uninterrupted audio connection, for maximum intelligibility and the best possible conference experience.

Running the DICENTIS services on the Windows Operating systems allows you to select the hardware which fits the performance requirements of your application. And with the wide range of computer hardware, there is always a solution available to fit your requirements. Next to this you can make use of the Windows virtualization possibilities which allows your IT department to host the DICENTIS software on multiple virtual machines all running on the same hardware which reduces the cost of ownership and increases maintainability.

### 5 Future-Proofing

After performance, future-proofing is the most vital aspect of any system today. The pace of technological advancement continues to accelerate, and businesses cannot afford to lock themselves into expensive systems which need to be replaced every five years. Before the availability of open-platform systems, every technology offered restricted expansion possibilities and a limited lifetime. Basing new systems on open-platform architecture ensures that they can evolve with the evolving platforms, extending their flexibility and their lifetimes indefinitely.

The fact that Windows and computer hardware have survived and matured over four decades of development proves that it is also the best of the best. It is constantly evolving, sustainable, and is used all over the world. And in the most critical applications.

That is why Bosch developed the DICENTIS system based services running on the Windows operating system and computer hardware as the platform to run on.

DICENTIS is only one of the many future-proof systems which will mark a new era of system sustainability.

### 6 Security

DICENTIS uses internationally recognized encryption standards for all audio and data. For highly sensitive meetings, this encryption offers the best protection against eavesdropping, unauthorized access, and data tampering. Why?

Proprietary hardware with secret protocol sounds good. Nobody knows the system except the specialists. Unfortunately, keeping your proprietary hardware and software up to date to safeguard it against the latest security threats requires enormous efforts from manufacturers and also from your IT department to put these updates on your systems.

That is why DICENTIS is based on Windows, because the windows operating system is maintained by Microsoft, which continuously maintains the operating system with new releases, patches and bug fixes and has mechanisms in place so that your IT department can maintain your systems without losing control or wasting numerous hours.

Likewise, the knowledge about security in a Windows environment is standard knowledge available to any IT department, so no additional training or external experts are needed. Which would otherwise be required for proprietary systems.

#### 7

#### Reliability

Meeting managers need to be able to rely on the conference system completely. The services are run on a Windows server PC that allows you to choose a hardware platform which suits your reliability requirements, like redundant power supply, RAID configuration of hard disks. Even redundant PC configuration solutions are available as a standard.

### 8 Scalability

The DICENTIS system can grow with you to accommodate any size conference. Depending on the size of the system or the amount of functionality, the requirements for performance needed by the services change. But only the requirements for the services change, which allows you to adapt the computer hardware to the needs of the system and leave all other components as they are. And as the performance of computer hardware increases every year, there will be suitable hardware now and in the future. The DICENTIS system is controlled by services that are run on a Windows server PC, which allows a more powerful one to be selected when required, or that services are run on different servers to share workload when the system size increases.



#### Flexibility

The DICENTIS platform enables IT managers to add functions and devices to communicate directly with the system through the Application Programming Interface (API). Customers can create apps to add customized functions that can be complementary to the DICENTIS system; for example, add a customized meeting control. Customization is limited purely by the imagination!

### 10 Maintainability

Not only is DICENTIS quick and easy to install and integrate, it is also easy to maintain. Because it cooperates and connects with other systems through standard IP protocols and Ethernet, adapting, repairing and securing the system only has to be done once. Technicians only need to know how to configure, operate, and maintain a single network, and standard routers, cables, and switches are replaced quickly and easily. Technicians can use network tools to get a quick and clear overview of their network and connected devices. To get this overview, technicians can use DOCENT.

And because the services are hosted on a Windows Server Operating system, no product specific knowledge is required from your local IT department.

#### **11 Cost-Effectiveness**

Using standard operating systems and computer hardware in a single, open-platform network also saves money. No expensive special equipment is required. Instead, off-the-shelf products, self-designed apps, and existing third-party systems can be integrated using standard cables. Sharing infrastructure with other applications will further reduce customer cost, since there is no need to install multiple networks next to each other. Bosch will continue to use standard IP, security, and connectivity protocol and equipment to offer customers worldwide the ultimate, cost-effective solution.

### 12 Conclusion

Based on standardized operating systems and computer hardware, DICENTIS brings customers an unrivalled combination of world-class multimedia performance in a future-proof system. Reliable and secure, it integrates easily and offers the most flexible, scalable, and cost-effective conference solution on the market today.

Bosch Security Systems B.V. Torenallee 49 5617 BA Eindhoven Netherlands www.boschsecurity.com © Bosch Security Systems B.V., 2019