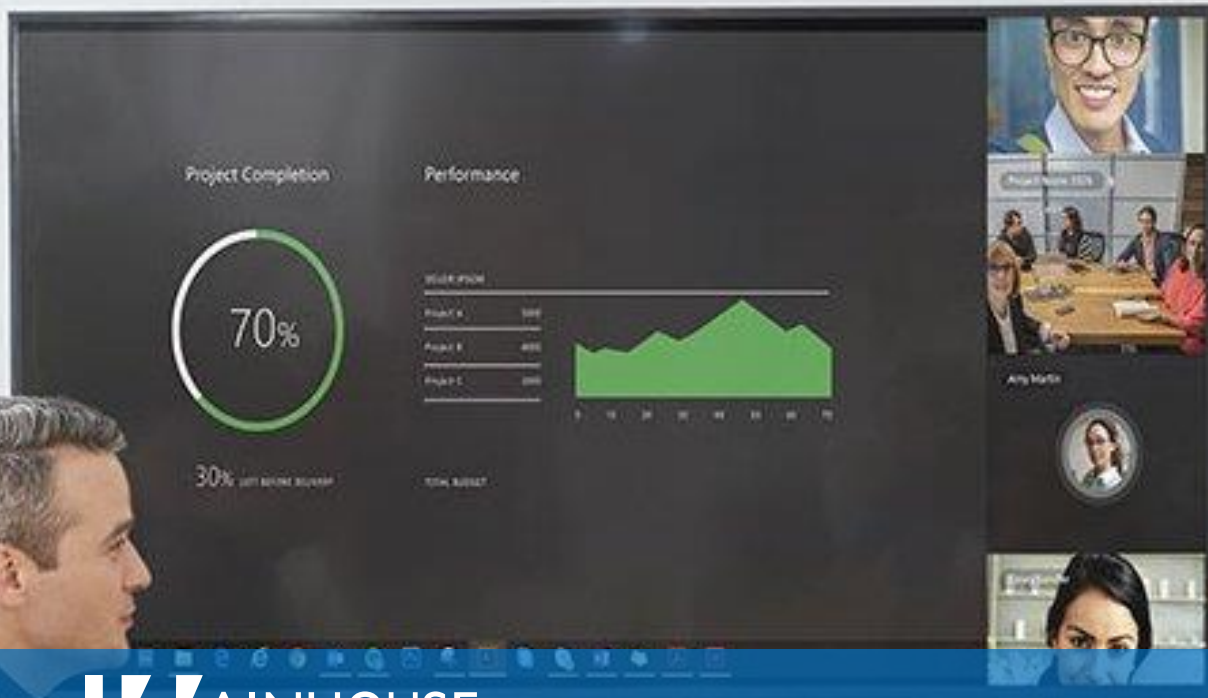


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Evaluation of the Logitech SmartDock

Hands-on testing of a secure meeting room console designed for the Skype Room System

This evaluation sponsored by ...



Background

Founded in 1981, Logitech International S.A. (Logitech) is a leading PC peripheral manufacturer offering webcams, keyboards, standard and “gaming” computer mice, PC speakers, mobile speakers, tablet accessories, home control devices / remotes, and more.

In 2011, Logitech formed the “Logitech for Business” division offering a variety of products and accessories targeting business / enterprise users. WR has used and evaluated numerous offerings from the company’s business division including the [Logitech GROUP](#) and [Logitech GROUP Kit](#) offerings.

In September 2016, Logitech announced the Logitech SmartDock - a table-top docking station and AV interface designed specifically for use with the Skype Room System solution from Microsoft.

In early 2017, Logitech commissioned the WR test team to perform a third-party assessment of its SmartDock solution. This document contains the results of our hand-on testing.

Skype for Business in the Meeting Room

For many years, enterprises around the world have used software-based video conferencing applications like Microsoft Lync and Skype for Business within their meeting rooms. However, these deployments suffered from a handful of challenges including:

- System Workflow – most conferencing applications (including Skype for Business for example) are optimized for desktop PC / notebook use and not for use in a meeting room on a large shared display
- User Interface – the need to use a keyboard and mouse to control the solution provided an unnatural, non-intuitive experience for those in the meeting room
- Physical Footprint – bring your own devices (BYOD), such as a notebook or NUC PC, requires extra cabling and AV hardware resulting in a cluttered and untidy installation

Microsoft’s recently released Skype Room System (SRS) solution¹ resolved the first two items in the list above. The Skype Room System package includes the following:

- a Surface Pro 4 (SP4) tablet – provided the compute platform and a touch user interface
- a new version of Skype for Business optimized for use in a meeting room environment

However, the SP4’s tablet form factor makes it well suited for personal and mobile use, but not for permanent installation in a shared space. In addition, the SP4 did not offer the AV connections needed in a meeting room environment. That’s where the Logitech SmartDock comes in.

¹ Skype Room System (SRS v2) is the newest version of a family of offerings formerly known as Lync Room Systems. Microsoft has announced that support for the first generation of Lync Room Systems will end in October 2018.

Understanding the SmartDock

The Logitech SmartDock is a mechanical docking station that essentially transforms a Surface Pro 4 into a meeting room touch panel. From a top-level view, SmartDock provides two key functions:

- Secure physical mounting of the SP4
- Access to the AV connections and signals needed within the meeting room

To be clear – SmartDock is far more than simply a physical vessel for the Microsoft Surface Pro 4 tablet.

SmartDock makes the SP4 more accessible and comfortable for users in the meeting room, and gives the SP4 the feel of a ruggedized appliance, while simultaneously protecting the device from theft and vandalism.



The Logitech SmartDock is available in two different packages:

- SmartDock only (MSRP US \$599) – includes the SmartDock device, several cables, and a few accessories (Torx screwdriver, etc.). With this configuration, connections for the power supply, camera, mic(s) and speaker, network, and display(s) are made at the base of the SmartDock.
- SmartDock with Extender Box (MSRP US \$799) – includes the same components as the SmartDock-only package, plus an extender box with mounting bracket, and a 16.4 foot extender cable. The Extender Box connects to the SmartDock using the 16.4 foot cable which services to move the connection point for the power supply, camera, mic(s), speaker, network, and display(s) away from the base of the SmartDock to a location a few meters away (e.g. behind the display, under the table, in a credenza, etc.).



Figure 1: SmartDock (L) and SmartDock Extender Box (R)

The Logitech SmartDock / Skype Room System combination can be used with any Windows-compatible accessories. However, WR expects that many customers will use one of Logitech's conferencing accessory solutions like Logitech GROUP (combined mic, speaker, and PTZ camera solution – see WR's [review of Logitech GROUP](#)) or the Logitech Brio 4K webcam. The SmartDock Extender Box has dedicated connectors designed for use with Logitech GROUP.

Hands-On Testing

Preparing the Surface Pro 4

Surface Pro 4s with the Skype Room System software pre-installed are available from Logitech resellers. For our testing, however, we started with a standard SP4. The process for installing the SRS software on a Surface Pro 4 tablet involves the following steps (detailed in Microsoft's online [guide](#)):

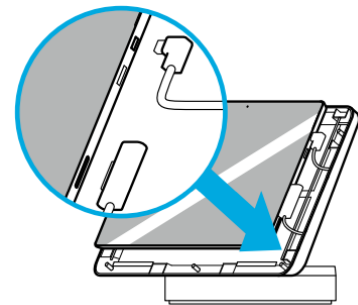
1. Installing the Skype Room System software onto the SP4; a process that involves creating and using a bootable Windows 10 Enterprise flash drive with some additional files (Skype Room System software, specific Logitech drivers, etc.).²
2. Creating and configuring a new resource and a new user for use with a Skype Room System in Office 365 or Exchange; a process that required the manual entry of numerous commands within Microsoft PowerShell.

The above is best completed by a trained IT professional.

Installing the Surface Pro 4 into the SmartDock

The physical installation of the Surface Pro 4 tablet into the SmartDock required the following steps:

- Open the dock base by removing seven screws from the case using the included Torx screwdriver
- Placing the SP4 into the dock
- Connecting the SmartDock's mini-display port and Surface Connect cables to the SP4 (see drawing at right)
- Closing the dock base and re-installing the 7 screws in the case



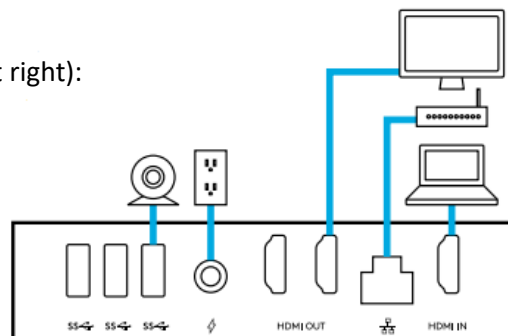
All in all, the above process took our team ~ 10 minutes to complete.

Making the Required AV / Network Connections

To make the required connections (power supply, camera, mic(s) and speaker, network, display(s), etc.), the SmartDock base plate must be removed; a one minute process requiring the removal of four screws.

After removing the base plate, the following connections at the base of the SmartDock are accessible (see drawing at right):

- 3x USB
- Power
- 2x HDMI out
- Ethernet
- 1x HDMI in



² The need to create a properly configured flash drive makes the first installation of a Skype Room System time consuming and complex. Subsequent installs, however, should take much less time and require less expertise.

The next step is to make the required signal and power connections – either directly to the connectors on the SmartDock base or at the Extender Box. As a part of our testing, we installed the SmartDock within our environment both with and without the Extender Box.

While making the connections, we noted and appreciated that the connectors were recessed within the base (see image below). We were, however, disappointed by the lack of a strain relief mechanism within the cable connection area.



Additional SmartDock Connectivity Features

HDMI Input

A standard PC or notebook (or in this case tablet) does not natively support an HDMI input. However, the ability to connect an HDMI signal (to present content or share content with remote participants) is a required function in the conferencing world. This addition of an HDMI input to the Skype Room System package is a major benefit provided by the SmartDock.

Dual HDMI Outputs

Although dual display functionality is not yet supported by the Skype Room System software, the SmartDock provides two (2) HDMI outputs. We expect Microsoft to add dual display capabilities to its software in the near future.

The SmartDock / Skype Room System Experience

After preparing our SP4, creating the necessary resource and user on our Office 365 account, installing our SP4 in the SmartDock, making all required connections, and re-installing the base plate on the SmartDock, we powered up the SP4 using the power button on the top of the dock.

The first thing we noticed was the professional look and feel of the SmartDock with the SP4 installed. The SP4 fit quite nicely inside the unit, and the color scheme and materials used within the SmartDock create a ruggedized, yet attractive overall package.

The next thing that caught our eye was the physical stability of the SmartDock / SP4 combination. Despite its prosumer-grade price tag, the SmartDock itself is quite heavy, and its center of gravity is such that the unit is extremely stable on the table. In addition, the curved rubber strips on the base plate of the SmartDock ensure that the unit does not slide around the table.

We also appreciated the ability to swivel the SmartDock 90 degrees in either direction. This feature makes the SmartDock, and specifically the SP4's touch surface, accessible to several users without having to move the unit around the table. Notably, when the display part of the dock is swiveled, the base of the unit, and more importantly the connected cables, do not move. This avoids cable strain or inadvertent disconnections.

As we pondered the concept of leaving a top-of-the-line Microsoft Surface Pro 4 tablet in a shared meeting room unsupervised, we came to realize that needing a Torx screwdriver to open the SmartDock makes it less likely that someone would be able to remove the SP4 from the SmartDock on a whim. Also, while installed in the SmartDock and running the Skype Room System software, the SP4 looks more like a dedicated touch panel than an SP4. This too should help cull any temptation to steal the tablet. And last but not least, the SmartDock also features a Kensington security slot.

The SmartDock also contains a motion sensor on the front of the unit that automatically wakes the SP4 when a person approaches the system. We tested this capability, and it worked exactly as expected.

Finally, we placed a few calls using our now fully installed and configured Skype Room System with Logitech SmartDock. Without exception, our test calls worked as expected, providing a Skype for Business call experience.

We also tested the wired HDMI input, a function provided specifically by the SmartDock, and successfully presented content from our notebook PC.

On a more critical note, we found several cable-management items that should be improved including:

- The pre-fabricated 16.4 foot cable included with the Extender Box is too bulky to route through a standard conduit, and too short to make its way from a table to the back of a display in many rooms. Also, the wire junction area on the pre-fab cable is too far from the cable connectors. As a result, the individual cable strands are visible outside the dock (see image above).
- The combination of the recessed cable area and the need to use a Torx screwdriver to open the SmartDock means users will be unable to re-seat cables that fall out of their connectors.
- The Extender Box concept could be improved by adding signal break-out functionality to the Extender Box itself (today the signals to/from the SP4 are broken out at the SmartDock itself and the Extender Box acts mostly as a connection point). This would enable the use of fewer, smaller cables between the dock and the Extender Box, resulting in a cleaner installation.

While none of these items materially impact day-to-day performance, we think additional thought around cable management would be worthwhile.³

³ Logitech partner C2G offers custom and standard connectivity options, as well as cable extension solutions for SmartDock. WR did not test any C2G solutions as a part of this effort.

Analysis and Opinion

We like both the concept and the implementation behind the Logitech SmartDock.

In the last few years, many enterprises have installed DIY Skype room solutions including some form of meeting room PC (e.g. an Intel NUC) controlled by a keyboard / mouse and running Skype for Business. While functional, this approach yielded a distinctly unnatural user experience.

The Logitech SmartDock helps solve the above issue by enabling organizations to use a Surface Pro 4 tablet as the in-room touch panel and compute platform for a Skype for Business meeting room experience. The result is a combined Microsoft / Logitech solution that is easy to buy (SmartDock is available from resellers or from select e-tailers including CDW and even Walmart), can be installed by an organization on its own, and sports a professional look and feel – at a consumer-level price.

We tested the Skype Room System including the Logitech SmartDock within our lab environment, and except for a few minor cable management nits, the solution did not disappoint.

Organizations seeking to Skype-for-Business-enable their meeting rooms should take a careful look at the Logitech SmartDock.

Contributing Authors / Research Team



Ira M. Weinstein is a Senior Analyst & Partner at Wainhouse Research and a 25-year veteran of the conferencing, collaboration and audio-visual industries. Ira has authored and contributed to dozens of articles, white papers, studies, reports, and evaluations on rich media communications, video conferencing, streaming and webcasting, audio-visual design and integration, business strategy, and general business practices. Ira specializes in providing strategic advisory services to vendors, resellers, and end-users within the collaboration space. Ira can be reached at iweinstein@wainhouse.com.



Saar Litman is a Senior Analyst & Consultant at Wainhouse Research and has 17 years' of experience in the audio-visual and video conferencing industry. Saar's primary focus is the products, services, and companies within the audio-visual space. In addition, Saar provides AV design services, helps enterprise organizations define and implement global AV standard systems and designs, and manages the WR test lab in Coral Springs, Florida. Saar can be reached at slitman@wainhouse.com.



Peter Schwarck is a Researcher & Technical Writer at Wainhouse Research. Peter has authored and developed content for private corporations, non-profits, and government organizations. In addition, Peter worked as an educational consultant while writing and developing textbooks and curriculums for foreign companies abroad. Peter can be reached at pschwarck@wainhouse.com.

About Wainhouse Research



Wainhouse Research, www.wainhouse.com, is an independent analyst firm that focuses on critical issues in the Unified Communications and Collaboration (UC&C). The company conducts multi-client and custom research studies, consults with end users on key implementation issues, publishes white papers and market statistics, and delivers public and private seminars as well as speaker presentations at industry group meetings.

About Logitech

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Logitech designs products that have an everyday place in people's lives, connecting them to the digital experiences they care about. More than 35 years ago, Logitech started connecting people through computers, and now it's a multi-brand company designing products that bring people together through music, gaming, video and computing. Brands of Logitech include [Jaybird](#), [Logitech G](#) and [Ultimate Ears](#). Founded in 1981, and headquartered in Lausanne, Switzerland, Logitech International is a Swiss public company listed on the SIX Swiss Exchange (LOGN) and on the Nasdaq Global Select Market (LOGI). Find Logitech at www.logitech.com, the [company blog](#) or [@Logitech](#).