



Lenovo™ ThinkSmart Hub 500

Save time and money with an all-in-one conferencing solution

The new Lenovo ThinkSmart Hub 500 took less time to execute common meeting tasks than standard conferencing systems, helping employees save time and organizations save money

The average employee attends two and a half conference calls a week.¹ With so much time dedicated to remote meetings, we rely heavily on conferencing technology. Yet for every call, we waste an average of ten minutes just getting started.² The Lenovo ThinkSmart Hub 500 changes the game with an accessible, efficient, all-in-one design that could help your employees save time—and your organization save money.

In hands-on jury testing at Principled Technologies, we asked volunteers to complete three common meeting scenarios (creating a new meeting, joining a scheduled meeting, and presenting their laptop) on the Hub 500 as well as two traditional conferencing platforms. We found that the Hub 500 enabled volunteers to complete these tasks in up to 89 percent less time than with the standard platforms. Over a year, this increased productivity could be worth up to \$193 in salary savings for each employee.

Instead of wasting precious time and money on meeting setup, the Lenovo ThinkSmart Hub 500 could help your employees focus on what counts: work that grows your business.



Join a scheduled meeting in up to 84% less time*



Create a meeting in up to 89% less time*



Save up to \$193 per employee*†

*Compared to traditional conferencing platforms

†Per year, based on an average annual salary



A meeting hub for the modern office

Tracy loves her job as a product manager, but lately she's been feeling the heat. She has only six weeks to launch her company's newest product. What's more, her development team on the East Coast has to collaborate with marketers on the West Coast to get it done. Tracy wants to prove herself. Still, the thought of so many remote meetings makes her break out in a cold sweat. Past experience has taught her that conferencing technology always seems to mess up at a crucial moment.

But Tracy's boss, Jason, has just overseen the onboarding of a new meeting system: the Lenovo ThinkSmart 500. Jason tells Tracy that this new system just might help her conquer her fears once and for all. Read on to see whether the Hub 500 benefits Tracy and keeps her meetings running smoothly.

Lenovo ThinkSmart Hub 500

The Hub 500 is a Skype for Business® purpose-built device that also integrates with Microsoft® Office 365™. With its 360-degree rotatable display and tabletop console, the Hub 500 aims to streamline the meeting process and reduce clutter in small- to medium-sized collaboration spaces. The Hub 500 has been designed to work with companies' existing displays and Skype for Business certified cameras.



Project content straight from your laptop

Today's a big day for Tracy: She needs to introduce the product launch to her teams in the office and on the West Coast. But even after leading several meetings, she's nervous. In the past, she's lost precious time dealing with problems ranging from hunting down computer logins and invitation links to troubleshooting faulty microphones. With the clock ticking on two coasts, she can't afford glitches in her Microsoft PowerPoint™ presentation. Tracy's not alone in feeling stressed: In one survey, one in four employees reported struggling to set up and schedule meetings using traditional web conferencing tools.³ What's more, these technological challenges were the number one factor contributing to late start times.⁴

Worried that the Lenovo ThinkSmart Hub 500 will continue this trend, Tracy arrives in the conference room fifteen minutes early. She doesn't need to double-check her email to confirm her reservation—the console shows she has the room booked for the next hour. Tracy sits down, plugs the HDMI cable on the table into her laptop, and watches as her screen projects to the display at the front of the room. Surprised, she leans back and checks her watch: Hooking up her laptop took all of 15 seconds. Once she's in the meeting, a tap of a button on the Hub 500 will share her display on participants' screens, too. With fourteen minutes to spare, Tracy shoots off some emails and runs through her slides one last time, feeling calm and collected by the time her meeting starts.

Project content
from your laptop
in up to
24%
less time

Join scheduled meetings with a single tap

To join the meeting, Tracy simply taps the console screen—a process that takes almost a minute less than the old system—and launches into her presentation. Without the technical difficulties that often plague remote meetings, she can focus on communicating the right message to her team.

Once Tracy has finished her presentation, she wants to continue the meeting but stop sharing her screen. She unplugs her laptop and the layout on everyone's screens switches back to the default full-screen mode. After a round of questions and goal-setting, Tracy says goodbye and hangs up. Both the console and front-of-room display return to their ambient states. Tracy leaves the room before her hour is finished, feeling confident that her team can get this product out on time.

Connect with remote coworkers through ad-hoc meetings

Tracy's colleagues are now midway through their product launch timeline. After a long holiday weekend, Tracy needs to check in face to face—but no one's had time to schedule a meeting in advance. Normally, an impromptu meeting would make Tracy worried that not everyone would get an invite link or enter the right code. Fortunately, the Lenovo ThinkSmart Hub 500 makes it easy for her to create an impromptu meeting.

In the conference room, Tracy starts a new Skype for Business meeting and begins typing the names of her remote coworkers. Since the Hub 500 links to the company's Microsoft Office 365 directory, Tracy can type the first few letters of a name and then scroll through the directory list. Once she's invited everyone into the new meeting, the Hub 500 selects the optimal video gallery layout to display.

With the Hub 500, Tracy can create an ad-hoc meeting in up to 89 percent less time than with a standard system. That means she saves up to almost two and a half minutes per meeting. Aided by a quick setup, Tracy and her colleagues speed through the agenda and hang up convinced their three-week deadline is within reach.

Save up to
55 seconds
when joining
scheduled
meetings

Save up to
2.4 minutes
when creating ad-
hoc meetings

Microsoft Office 365

Microsoft Office 365 gives business employees online and offline access to the latest version of popular Microsoft Office applications like Outlook™, Word, Excel™ and PowerPoint. Learn more at <https://www.office.com/>.

Call a landline phone using Skype for Business

With only a few days to go until the product launch, Tracy's boss, Jason, wants to check in with a few key members of the team. The catch? Jason is traveling and doesn't have access to a conference-ready space. "Not a problem," Tracy assures Jason; she'll just call his phone from the conference room. Tracy dials Jason's phone number, hits the call button, and waits for it to connect. Since the Lenovo ThinkSmart Hub 500 is connected to the company's Office 365 account, it uses their pre-existing calling plan. With Jason on the line, they troubleshoot some last-minute snags and prepare for launch day.

Skype for Business

Skype for Business is a video conferencing tool that integrates with Microsoft Office 365. Skype for Business allows users to create, join, and schedule meetings; use Microsoft Office tools like Outlook and PowerPoint; join from any device; send instant messages during meetings; and share screens or files. Learn more at <https://www.skype.com/en/business/>.



Put employee time and company money to good use

Success! Thanks to their stellar collaboration, Tracy's team launches the product on time. After sending out a round of well-deserved congratulations, Jason sits down to examine what made the project a winner. He has a lot riding on this—after all, he helped convince his company to switch to the Lenovo ThinkSmart Hub 500 in the first place.

Thankfully, he hears only good things about the new meeting system. Again and again, his employees tell him that the Hub 500 helped facilitate smoother meeting experiences. In fact, when Jason looks at the use case of creating ad-hoc meetings with the Hub 500, he finds that employees could be saving up to 2.4 minutes per meeting compared to the standard conferencing systems they used before.

Jason realizes that, with an average of two and a half virtual meetings per week, the Hub 500 could be helping each employee save up to four and a half hours a year on creating ad-hoc meetings. Curious, Jason calculates how much money these time savings could add up to in a year, based on average salaries. To his surprise, he discovers that each employee's increased productivity could be worth up to \$193, based on how much less time it takes them to create ad-hoc meetings with the Hub 500 than with standard conferencing systems. (To learn more about how Jason arrived at this number, see [Appendix B](#).)

Jason saves his analysis of the time and money conserved thanks to the Hub 500. Then he books a dinner reservation at his favorite restaurant to celebrate. His next performance review is in a couple weeks, and he knows what he'll be talking about.

Save up to
4.5 hours
per year
for one
employee

Save up to
\$193
of an average
yearly salary

Save more
**employee
time,**
up to:



\$6 when presenting laptops*†



\$73 when joining meetings*†



\$193 when creating meetings*†

Save more
**company
money,**
up to:



9 minutes when presenting laptops*



103 minutes when joining meetings*



272 minutes when creating meetings*

* Per year, compared to traditional conferencing platforms

† Based on an average annual salary

Jury-testing the Lenovo ThinkSmart Hub 500: How results show a more intuitive system

In the past decade, many companies have opted to use web-based communication platforms. To see how the Lenovo ThinkSmart Hub 500 competed with these traditional platforms, Citrix® GoToMeeting® and Cisco® WebEx®, we conducted a jury test where we timed how long it took six volunteers to complete a set of tasks on each. All our volunteers self-identified as having some experience with conference meeting software, but none had prior experience with the Hub 500. Despite these advantages, the Hub 500 raced through tasks in up to 89 percent less time than the traditional platform experiences. For the full breakdown of test results, see [Appendix B](#).



Conclusion

With 32 percent of meetings conducted virtually,⁵ remote meetings have become a reality of modern office life. Conferencing technology can have a huge impact on how smoothly your meetings go—and how much, or how little, employee time gets wasted in the process. Our testing found that the Hub 500 can help speed up the time it takes to do everyday tasks like creating an ad-hoc meeting, joining a scheduled meeting, and making a laptop presentation. What's more, those time savings could accumulate to save your company up to four and a half hours of employee time per year, or up to \$193 of an average annual salary. With the Lenovo ThinkSmart Hub 500, your employees could spend less time solving technical hiccups and more time solving the problems that matter.

On January 5, 2018, we finalized the hardware and software configurations we tested. Updates for current and recently released hardware and software appear often, so unavoidably these configurations may not represent the latest versions available when this report appears. For older systems, we chose configurations representative of typical purchases of those systems. We concluded hands-on testing on January 22, 2018.

Appendix A: How we tested

We compared the Lenovo ThinkSmart Hub 500 to two commonly-used conferencing platforms: Citrix GoToMeeting and Cisco WebEx. We chose them because they include the types of features people commonly encounter in conferencing technology. However, we are not suggesting that these two systems contain definitive examples of software feature sets. We used trial versions of each system: GoToMeeting version 8.18.0.8034, and WebEx Meeting Center App version 32.10.1.2. Paid versions of this software might include features that result in different test times than the ones we recorded using the trial versions.

Testing the Lenovo ThinkSmart Hub 500

Because the Hub 500 required so few steps to conduct the three scenarios, we opted to read the instructions out loud to each volunteer and record the time it took them to perform it. To begin, the tester read the following to each volunteer: "As we said in the email you received, we are timing how long it takes you to complete three scenarios on the Lenovo ThinkSmart Hub 500." After the participant had completed all three tests, the tester said, "Thank you very much. Now that you're familiar with the Hub, we'd like to step you through the scenarios again." The volunteer then ran through their previous tasks. Below, we have included the tester's script followed by the steps involved for timing.

Joining a pre-scheduled meeting

Tester: "First, we need you to use the Hub to join a meeting we've already created."

1. Start the timer.
2. Stop the timer when participant has joined meeting.

Creating an ad-hoc meeting

Tester: "For the second scenario, we need you to use the Hub to start a new meeting, and invite User 1 to the meeting."

1. Start the timer.
2. Stop the timer when User 1 has joined the meeting.

Presenting your laptop screen to the conference room

Tester: "For the third scenario, we need you to present this laptop on the provided screen using the Hub."

1. Start the timer.
2. Stop the timer when the screen has presented.

Testing GoToMeeting

The following scenarios assume that the user has installed the GoToMeeting desktop application onto the dedicated conference room PC, and that they have not already logged into a GoToMeeting account.

Joining a pre-scheduled meeting

1. Create a pre-scheduled meeting as a GoToMeetings administrator (User 1). Visit <https://global.gotomeeting.com/>, and click Schedule.
2. Start timing as User 1 walks into the conference room and wakes up the dedicated conference room PC.
3. Launch the GoToMeeting desktop app on the dedicated conference room PC, and click My Meetings.
4. Enter User 1's GoToMeeting login credentials when prompted, and uncheck the Remember me on this computer checkbox before clicking Sign In.
5. Select the meeting created in step 1, and click Start.
6. Once the meeting has started and the audio panel indicates that the meeting audio connection has been established, stop timing.

Creating an ad-hoc meeting

Note: Steps 12-15 may be cached on User 2's laptop and will probably be omitted.

1. Have someone (User 2) sit outside of the conference room with their laptop. They must be prepared to receive an invite link and join the meeting remotely.
2. Start timing as a GoToMeeting administrator (User 1) walks into the conference room and wakes up the dedicated conference room PC.
3. Launch the GoToMeeting desktop app on the dedicated conference room PC, and click My Meetings.
4. Enter User 1's GoToMeeting login credentials when prompted, and uncheck the Remember me on this computer checkbox before
5. Click Sign In.
6. Select the permanent recurring meeting (e.g. User 1's Meeting), and click Invite.
7. Click Copy to copy the meeting join link (e.g. <https://gotomeet.me/User1>) to clipboard.
8. Open a browser and navigate to the Outlook web client at <https://outlook.office365.com/>.
9. Email the invite link to the other attendee (User 2).
10. Have User 1 close out of the invite screen in the GoToMeeting app, and click Start to start the permanent recurring meeting.
11. As soon as User 2 receives the invite link in their email, have User 2 click the link to connect to the meeting in the Chrome browser GoToMeeting webapp.
12. Have User 2 click Use computer audio when prompted.
13. Have User 2 click Allow if Chrome asks for permission to use the microphone.
14. Have User 2 click OK, I'm all set if prompted to select audio devices.
15. Have User 2 enter their name in the Join the meeting as... field.
16. Once both User 1 and User 2 are connected to the meeting and the audio connection has been established, stop timing.

Presenting your laptop screen to the conference room

1. Start timing as User 1 walks into the conference room with their laptop.
2. Connect the laptop to the conference room display's HDMI cable.
3. Use the display's remote to switch to the laptop HDMI input (e.g. HDMI2).
4. Stop timing when the laptop's screen is displayed on the conference display.

Testing WebEx

These scenarios assume that the user can test on a dedicated conference room PC, and that they have not already logged into a WebEx account. These scenarios also assume that the computer has already completed any software installs or browser extensions.

Joining a pre-scheduled meeting

1. Create a pre-scheduled meeting as a WebEx user (User 1). Visit https://company_name.my.webex.com, and click Schedule a Meeting.
2. Start timing as User 1 walks into the conference room and wakes up the dedicated conference room PC.
3. Launch the internet browser on the dedicated conference room PC and navigate to <https://signin.webex.com/collabs/auth>
4. Enter User 1's WebEx login credentials when prompted, and sign in.
5. Click the WebEx site menu, and click My Meetings
6. Select the meeting created in Step 1, and click Start.
7. Click Connect Audio and Video.
8. Once the meeting has started and the Audio panel indicates that the meeting audio connection has been established, stop timing.

Creating an ad-hoc meeting

1. Have someone (User 2) sit outside of the conference room with their laptop. They must be prepared to receive an invite link and join the meeting remotely.
2. Start timing as a WebEx host user (User 1) walks into the conference room and wakes up the dedicated conference room PC.
3. Launch the internet browser on the dedicated conference room PC and navigate to <https://signin.webex.com/collabs/auth>
4. Enter User 1's WebEx login credentials when prompted, and sign in.
5. Click Start Meeting.
6. Click Connect Audio and Video.
7. In the meeting, click Invite & Remind.
8. Type in the email address of User 2, and click Send.
9. As soon as User 2 receives the invite link in their email, have them click the link to connect to the meeting in the Chrome browser WebEx web app.
10. Have User 2 click Connect Audio and Video when prompted.
11. Once both User 1 and User 2 are connected to the meeting and the audio connection has been established, stop timing.

Presenting your laptop screen to the conference room

1. Start timing as User 1 walks into the conference room with their laptop.
2. Have User 1 connect the laptop to the conference room display's HDMI cable.
3. Have User 1 use the display's remote to switch to the laptop HDMI input (e.g. HDMI2).
4. Stop timing when the laptop's screen is displayed on the conference display.

Appendix B: Test results and cost analysis

We timed how long it took volunteers to complete the tasks outlined in [Appendix A](#) and calculated the average of the results. Volunteers completed tasks on each system twice: once for a “cold” run, and a second time for a “warm” run. On the Lenovo ThinkSmart Hub 500, “cold” runs meant volunteers had never encountered the Hub 500 and did not know how to use it. By contrast, volunteers using the GoToMeeting and WebEx tools had already encountered similar platforms—making their “cold” runs less of an introduction and more of a reeducation. While we averaged the “cold” and “warm” test results of the GoToMeeting and WebEx systems, we included only “cold” test results for the Hub 500. Even with this advantage, the time results of the Hub 500 beat the results of the comparison platforms in every test.

Our savings numbers assume that all meeting participants share the time costs or time wins while the leader of the meeting joins a scheduled meeting, creates an ad-hoc meeting, or shares their laptop screen. One study shows that employees attend eight meetings a week, 32% of which are virtual; therefore, we assumed 2.56 virtual meetings per week.⁶ With a 44-week work year, we concluded that employees would attend a total of 112.64 virtual meetings per year. We multiplied this number by time savings of up to 2.418 minutes per meeting (see Table A, “Create meeting” column) to reach a yearly time savings of up to 272.364 minutes.

We assumed an employee would receive a weekly salary of \$1,209, which is the median salary that employees in management, professional, and related occupations earn according to the Bureau of Labor Statistics.⁶ We multiplied the weekly salary by 52 to arrive at an annual salary of \$62,868, and used a benefits calculator to reach a total annual compensation of \$88,797.⁷ Assuming a 40-hour week and 52 weeks in a year, we calculated that each minute of employee time costs \$0.71 and multiplied that number by the yearly time savings of 272.364 minutes. We concluded that increased employee productivity could be worth up to \$193.38, when applying the use case of creating an ad-hoc meeting with the Lenovo ThinkSmart Hub 500 versus traditional platforms.

Table A: Lenovo ThinkSmart Hub 500 vs. GoToMeeting

Hub 500 (Cold) vs. GoToMeeting (Cold + Warm)			
	Join meeting	Create meeting	Present laptop
GoToMeeting average (sec)	46	162.88	21
Hub 500 average (sec)	10.39	17.83	15.87
% Less time	77.41%	89.05%	24.43%
Time saved (sec)	35.61	145.05	5.13
Time saved (min)	0.594	2.418	0.086
Time saved yearly (min)	66.908	272.364	9.687
Money saved yearly (per employee)	\$47.50	\$193.38	\$6.88

Table B: Lenovo ThinkSmart Hub 500 vs. WebEx

Hub 500 (Cold) vs. WebEx (Cold + Warm)			
	Join meeting	Create meeting	Present laptop
WebEx average (sec)	65.47	100.03	16.11
Hub 500 average (sec)	10.39	17.83	15.87
% Less time	84.13%	82.18%	1.49%
Time saved (sec)	55.08	82.2	0.24
Time saved (min)	0.918	1.370	0.004
Time saved yearly (min)	103.404	154.317	0.451
Money saved yearly (per employee)	\$73.42	\$109.57	\$0.32

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- 1 See [Appendix B](#), paragraph 2 for an explanation of how we reached this number.
 - 2 Ovum, “Collaboration 2.0: Death of the Web Conference (As We Know It),” accessed January 15, 2018, <http://www.eventapps.com.au/collaboration-2-0-death-of-the-web-conference-as-we-know-it/>.
 - 3 *Ibid.*
 - 4 *Ibid.*
 - 5 *Ibid.*
 - 6 Bureau of Labor Statistics, “Usual Weekly Earnings of Wage and Salary Workers, Fourth Quarter 2017,” accessed January 23, 2018, <https://www.bls.gov/news.release/pdf/wkyeng.pdf>.
 - 7 Salary.com, accessed January 23, 2018, https://swz.salary.com/MyBenefits/LayoutScripts/Mbfl_Result.aspx.
 - 8 Ovum, “Collaboration 2.0: Death of the Web Conference (As We Know It),” accessed January 15, 2018, <http://www.eventapps.com.au/collaboration-2-0-death-of-the-web-conference-as-we-know-it/>.

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