Introductions

Brandon Fischer
Cisco
Territory Account Manager

Edwin Dotson
AMS.NET
Solutions Architecture Manager

Omar Capacetti
Cisco
Systems Engineer

Dr. Lance Ford
Cisco
Education Advocate
Attendee Roles

- Business Services
- Ed Services
- IT
- M&O
- HR
- Other
1. Goals
2. Current Status and Challenges
3. Assessing the Network
4. Cisco Camera and Presentation Solutions
5. Webex Classrooms
1 Goals

**Goal 1:** Understand the current challenges for remote/hybrid learning, and different ways districts are attempting to solve those challenges

**Goal 2:** Understand how streaming video affects the demand on a network, and hear about options for assessing your network

**Goal 3:** Understand the capabilities of Cisco video solutions in a classroom

**Goal 4:** Learn about Webex Classrooms, and its benefit for teachers and students
1. Goals
2. Current Status and Challenges
3. Assessing the Network
4. Cisco Camera and Presentation Solutions
5. Webex Classrooms
Student Information System
Learning Management System
One to One Device Deployment
Network Security
Phones and Speakers
Cameras
H-VAC
Access Control
Lights
SBAC Testing
Digital Curriculum
Student Information System
Learning Management System
One to One Device Deployment
Network Security
Phones and Speakers
Cameras
H-VAC
Access Control
Lights
SBAC Testing
Digital Curriculum
Current “Solutions”
Current Challenges

Administration
Cost
Training
Roadmap – What will be needed in the future?
Variation in requirements (subject, grade level)
Union concerns

Teachers
Workflow
Class Management
Device Management

IT
Integration – software and hardware
Support and Troubleshooting
Installation
Insufficient Network Infrastructure
The Goal

We would like to have a solution that works whether or not our classroom looks like:

Maximize positive impact for remote learners, and minimize negative impact on teachers and students in the classroom
1. Goals
2. Current Status and Challenges
3. Assessing the Network
4. Cisco Camera and Presentation Solutions
5. Webex Classrooms
Assessing the Network

Internet/WAN connection

Video and Bandwidth

Network Infrastructure

Quality of Service
Assessing the Network

Internet/WAN connection

What is your current ISP connection speed, both for upload and download?
Assessing the Network

- Internet/WAN connection
- Video and Bandwidth
- Network Infrastructure
- Quality of Service
Assessing the Network

Is your wiring/cabling up to date?
Is your wireless environment robust enough?
Assessing the Network

- Internet/WAN connection
- Video and Bandwidth
- Network Infrastructure
- Quality of Service
What is your current network utilization?

Assessing the Network
Assessing the Network

Internet/WAN connection

Video and Bandwidth

Network Infrastructure

Quality of Service
Assessing the Network - QoS
Assessment Features

Physical Connectivity
• Collect Performance metrics
• Evaluate throughput
• Assess potential density issues

Quality of Service
• Does it exist in the network?
• Is it optimized to prioritize video or audio

Endpoints
• Assess minimum requirements
• Review known client and/or OS issues

Network Security
• Evaluate firewall, web filtering, SSL
• Validate rules and policies
• Review resource utilization

Video Conferencing Security
• Review video conferencing solution security

Deliverables
• Remediation recommendations
• Video conferencing best practices
<table>
<thead>
<tr>
<th>Assessment Features</th>
<th>Standard</th>
<th>Enhanced</th>
<th>Premium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment Customer Interview</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>DO/Core Location Testing and Assessment</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Review of Current Video Application Statistics*</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Live Monitoring and Review of Video Application Statistics*</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Review Bandwidth Performance from a Single IDF to ISP Handoff**</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Review of Entire Physical Path from a Single Edge IDF to ISP Handoff (Including wiring overview, AP placement, hardware assessment, and configuration review)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Quality of Services (QoS) Configuration Review</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Firewall Policy Review for Video Application</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Assessment of Current Video Application Security Practices</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Report on Findings</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Remediation Recommendations Report</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Video Conferencing Best Practices</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Assessments including Additional Sites:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Additional Remote Site Testing and Assessment (as above testing)</td>
<td>✓</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Up to 3 Additional Remote Site Testing and Assessment (as above testing)</td>
<td>-</td>
<td>✓</td>
<td>-</td>
</tr>
<tr>
<td>Up to 10GB Throughput Testing on Main Site plus 4 Additional Sites (as above testing)</td>
<td>-</td>
<td>-</td>
<td>✓</td>
</tr>
<tr>
<td>Complete Assessment at All Remote Sites</td>
<td>Please request a custom quote to include all remote sites</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Requires access to customer video application management portal

**True bandwidth measurement to ISP will require that ISP has local speed test capabilities or is able to provide needed access for our measurement tools.
1. Goals
2. Current Status and Challenges
3. Assessing the Network
4. Cisco Camera and Presentation Solutions
5. Webex Classrooms
Questions?
Thank You!
Dr. Lance Ford