Barco | Whitepaper

RMM Demystified

The Value for Managed Service Providers?

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Introduction

A/V RMM the true path to expand into the cloud managed services realm

A/V industry observers today have a sensation of déjà vu by witnessing comparable transformation with the IT industry. Likewise, there is a traction towards managed services which is totally expected.

As a result, we are seeing a gold rush amongst A/V integrators competing with traditional IT service providers wishing to get their share of the pie.

Although the overall MSP market is estimated to grow to USD 253 Billion by year 2022 (1), with 21% share for cloud (2), the competition is already fierce as new players enter the market. The key to success is based on the provider agility to quickly grasp the market needs and to deliver services in the most efficient way.

Source: MarketsandMarkets analysis

(1) Source: Apr 23, 2019 (AmericanNewsHour via COMTEX)
(2) Source: MarketdandMarkets analysis

A 3-year survey amongst the end user customers shed some light on the needed services.

Market Needs

Customers pain points

- Improving meeting user experience
- Improving reliability of meeting room equipment
- Optimizing usage and reducing cost
- Minimizing time waisted to start a meeting
- Proactive maintenance
- Increasing reactivity when something is wrong
- Standard and simple use of meeting rooms
- Insight and reporting to help improve all the above and plan

To reach this nirvana, Managed Service Providers tend to combine services that include integration, maintenance, support and lots of on-site support staff.
But very quickly, this method shows its limitations in reach and scalability.

MSP challenges

- Decreasing cost of on-site support personnel
- Dealing with tight SLAs
- Protecting your customer data security
- Delivering a unique customer experience

New threats are coming from major players

In the AV market, giants like Amazon, Google and Microsoft are also looking to take their share of this windfall by encouraging companies to directly access their cloud-based tools to manage their meeting rooms and devices.

Today, most MSPs feel their greatest threat is cloud providers, as opposed to other MSPs. (1)

For MSPs, it is not a vain dream to overrun such market pressure and continue their growth. It is rather a matter of adapting to this new reality.

MSPs can leverage their expertise in the AV field to deliver value to their customers. But first they need to reduce their cost of operation and free their resources to introduce and deliver new services.

(1) Source: WALTHAM, Mass.--(BUSINESS WIRE)--Sonian

Compete with equal footing

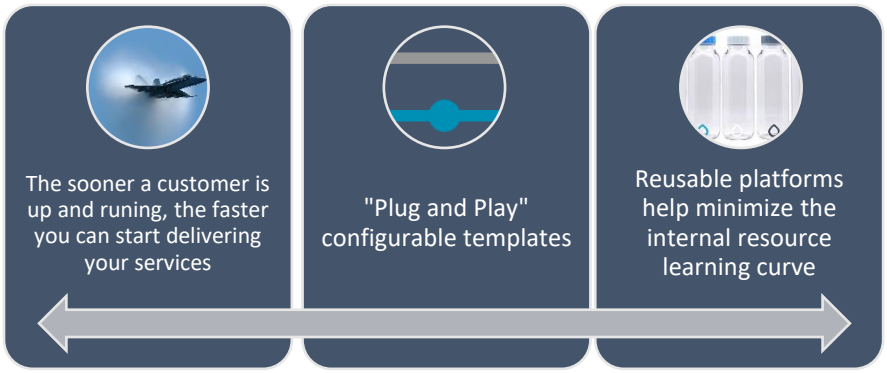
Expanding service offerings yet lowering the operating cost could be achieved when MSPs are properly equipped with the right tools. The adoption of cloud technology and a device agnostic Remote Monitoring and Management solution (RMM) could be the most legitimate path.

- Customers want their data secured, save cost by better provisioning and improve their users' meeting experience. This is especially true in a tight labor market, where companies are eager to retain their generation Y and Z employees by giving them access to technology that works and is available when it's needed.

Where to start

Accelerating customers' onboarding helps reducing costs and increases customer satisfaction. MSPs struggle with this effort-intensive phase as their customers have different meeting rooms and devices landscapes.

Using an RMM that provides repeatable configuration templates, access to a large library of device harmonized drivers, duplication and cloning capabilities, mass ingestion for initial setups and easy integration with the customer's identity provider will help streamline their onboarding process.



Digital Edge

Monitoring multiple installations through one single pane of glass

RMM systems deliver in a single pane of glass the ability to service multiple customers and installations to MSPs. This allows their support teams to have a 360° visibility to all or to a sub step of their customers' rooms/devices and have live statuses very much like a law enforcement control room.

RMM provides the MSPs with the differentiating edge to add value to their customers and at the same time reduce the need to have 24/7 on-site presence.

By leveraging an automation tool like AV RMM solutions, that combine both monitoring and control, service providers can efficiently monitor the state of their customers' AV assets, as well as being able to take remote action to change their state.

The time the AV MSP will save by being able to remotely reboot devices and take remote detailed control, is priceless and will greatly lead them to cost reduction.

The system can be delivered SaaS or On-Premise. When used as a cloud-based deployment, the MSP can centralize and optimize his resources across clients. In an On-Premise deployment, having this monitoring and control over a large installation of rooms and devices in a single instance, will still enable the MSP to make significant cost saving both on resources and time.

Automation leads to higher user experience

Imagine being able to preset conditional behavior that brings a room and its assets to a certain (state ideal for a meeting), and turns it back to the original state right after the meeting is over. Making these predictable changes as planned events or triggered by ad hoc stimulations, will enhance the user experience, optimize usage, and lead to real cost saving for the customers.

Some RMM systems offer workflow settings for room automation. Not all RMM vendors are equal on this aspect. Some vendors require extra coding to be done, and some provide means to handle this through direct configuration. The result is the ability to create specific behavior in a room based on conditions or events. Once the conditions are valid or the event has occurred, the devices in the meeting room will morph the expected behavior. In general, MSPs are eager to achieve this great amount of room behavior automation without the need of adding a single line of code.

MSPs needing to create a smooth and reliable user experience for their customers will benefit from these types of tools that allow them to quickly set up automations. Some RMM systems go further and make use of templating, which helps the MSP to standardize room settings based on room types or room locations. This method leads to higher efficiency by eliminating the need to repeat the same tasks again and again.

RMM Integration with calendaring servers like Exchange or Office 365 is another must-have feature that allows RMMs to be in sync with meetings booked by people using their Outlook Calendar. Such a feature further enhances RMM capability to automate based on bookings, and to have a tight control around the booking versus usage. Later, MSPs could produce meaningful insights to their customers to enable them to better plan and act on meeting misuses.

Multitenant visibility and monitoring but still controlled by access right

It is rarely the case that all the MSP's customers/tenants are handled by the same team. So, it's essential for the RMM system to allow visibility to all or a subset of tenants and provide a Chinese Wall to prevent conflicts of interest between servicing teams. Especially in the financial industry, using a Chinese Wall policy help to comply with security regulation.

Once the visibility is established, the servicing team members could individually personalize their monitoring dashboard to reflect their area of attention. That helps separate tasks amongst technicians for better reactivity.

The use of customized widgets focusing on real time reporting on devices or on meeting rooms states (like device temperature, lamp hours and In Use meeting rooms), can further empower each technician to help prevent issues before they impact the smooth functioning of meetings.

Powerful analytics

A Doodle Report (1) on the state of meetings show tremendous impacts on poorly organized meetings and this has a real cost for companies. Therefore, it goes without saying that companies are eager to have the right visibility on meeting usage data.

Whether they need this to take corrective actions, better plan their meeting rooms configuration or make savings through energy saving or proactive maintenance, an RMM combined with analytics on room booking, usage, device states and usage is the answer. This will enable the MSP to produce meaningful reports for their customers. This is a real added value service that positions the MSP as a solution provider and a trusted advisor.

(1) Source: Doodle The state of meetings report 2019

Reporting is also a necessary tool for the MSP to demonstrate the compliance against the agreed SLA with the customer. These types of reports are especially significant when it combines alarm data on device states with a resolution time that is driven in the connected ticketing system.

With the availability of big data farms in the cloud and the addition of artificial intelligence (AI), MSPs could for instance proactively plan interventions and maintenance, thanks to analytics on AV devices type and usage patterns over time.

Of course, many other patterns could be analyzed and used by the AI engines in order to recommend best settings/configuration for an optimal result.

Alarms and integration with PSA (professional services automation) systems

Another crucial function for an RMM is to be aware of malfunctions, and to generate live alarms when a malfunction is detected. Alarms are based on configurable states and are triggered when certain conditions are present. Things like device temperature could be a good parameter to be alerted on, since it can cause device failure. Other cases like a wrong display source could indicate that someone has manually tampered with the input/output source. The combination of multiple conditions could be a method to trigger alarms with higher severity. There are even some companies wishing to monitor the presence of the tablets on their stands, to make sure they are charged at all time. If removed the system generates an alarm.

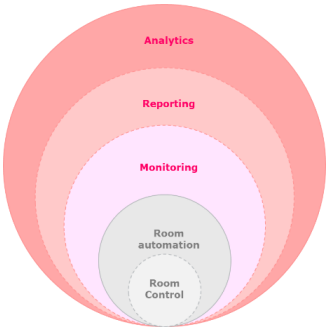
When monitoring many rooms, all of them equipped with multiple AV and non-AV devices over multiple sites or a myriad of installations, the system requires a filterable/searchable view to see alarms based on their severity level. If not, it is very difficult to manage alarms. In addition, you may want to be notified by e-mail or by SMS when certain alarms are triggered.

As many Managed Service Providers are using different teams to monitor and to intervene, they often access a ticketing system to dispatch interventions according to specific procedures.

Ticketing systems provide a workflow setup based on the ticket severity. Having your AV RMM alarms automatically trigger the creation of a ticket in those systems will allow a tight coordination between those 2 teams.

In the Monitoring system the MSP technician can continue monitoring the progress on a high severity alarm as it is remediated. Through a bi-directional integration, RMM can display the ticket status from creation until closure. Once it is closed, the technician can acknowledge the alarm in the RMM, or the system could be configured to automatically handle this.

This scenario provides the perfect combination to MSP teams to set thresholds on when a physical intervention is required and to deliver quick responses when it is needed.



By adding the control dimension to the monitoring, it becomes possible in some cases to remotely resolve 80% of cases without on-site intervention.

The logging mechanism

Having access to meaningful logs is essential to debug or to understand certain device behaviors. But knowing what to log and how to access logs is the real challenge. Generally, technical users often complain that looking at logs is like searching for a needle in a haystack. There are many reasons for this complain. First, it is caused by the fact that applications are gathering logs at different levels. There are low level logs that could be just a handshake exchange between two systems, tracing between nodes for latency, as there are logs on actions taken on a device and changes in the state of the device. Logs could also be scattered because they are occurring in different parts. Logs could also have severity level. A good log system in an RMM system is capable of centralizing and classifying logs based on their meta data and use the classification to display the appropriate logs to the appropriate personas.

Proper logs could also serve as an audit trail for compliance in some industries. Nevertheless, logs can grow fast and consume lots of storage space which could be costly. It is therefore essential to use the classification as a method to determine which logs should be kept longer versus those that could have a shorter lifespan.

Logs and alarms go hand in hand. Some logs could be set to trigger alarms allowing MSPs to catch a developing situation that could lead to a device or system malfunctioning at a later stage. Logs are also important data that could be analyzed by the AI in search of patterns in behaviors.

Can’t do without Device Configuration

Considering any medium to large campus or enterprise implementation including hundreds of meeting rooms, each equipped with hundreds of AV devices, MSPs will end up managing a myriad of heterogenous endpoints most probably in the thousands per tenant. Depending on the device, and if the firmware info such as version number is exposed for the driver to pick up, the RMM system is the ideal candidate to automate the firmware update process. In addition, for those IoT ready devices directly connected to the Cloud like Microsoft Azure IOT hub, the firmware update can be handled remotely. The automation process could include a scan of outdated firmware, followed by an alarm on those specific endpoints and a manual decision for update by the technician based on the available update. For those devices not exposing the right information, it is still possible to manage maintenance based on the last date of update manually entered as a metadata on device info in the RMM system.

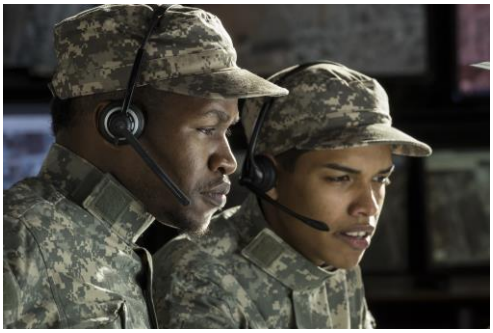
Mobility usage

Mobility is paramount for intervention teams. Of course, you don’t want to make all RMM available features displayed on your smartphone, but certainly the most relevant ones related to mobility.

Things like Alarms on devices, the possibility to communicate/chat with the central office, ability for the dispatched technician to access the room control automatically once in the room are amongst the must-haves for MSPs.

Security considerations

Last but not least, customers are adamant about the security of their data and network. Cyberattacks are non-discriminatory and are undoubtedly on the rise. Reinforced security in the cloud is a shared responsibility of both the web application and the hosting cloud platforms like Azure or Amazon (AWS). Implementing separate VLAN for the AV devices is a good place to start. Also, the SaaS RMM must include the use of https and secure WebSocket for internal communication between modules forcing the system to work without the need of any open ports for incoming traffic in the firewall.



The use of whitelisting for a more secured communication between local and cloud components, two factor authentications for all connecting users, centrally enforced policies through ADFS, and dynamic group user access rights that help prevent access to revoked users, are amongst the best practices required by the RMM system. In addition, certifications on GDPR compliance for user data protection or ISO 27001 specification for an information security management system (ISMS) would demonstrate that the provider is serious about the topic.

Conclusion

The market balance is shifting, and it could be overwhelming for many Managed Service Providers. But history has shown that the real leaders are the ones that have positioned their product or service offering during the turbulent times. Barco partners benefit from an experienced AV provider. With the unique software solution Overture RMM, Barco contributes to the success of its service partners. We have designed Overture as a versatile, device agnostic solution to specifically serve the need of MSPs to monitor and control all their customers' meeting rooms and training classes AV devices, in a single and secured environment.

For more detail click here: https://www.barco.com/en/products/av-control