

The Technology Manager's Guide to Streaming Media



Photo courtesy of Sonic Foundry

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CHOOSING A PATH FOR STREAMING MULTIMEDIA

SHOULD YOU CHOOSE ON-PREMISE, MANAGED SERVICES...OR BOTH?

Over recent years, multimedia content has become a critical part of every day life in both business and education. Whether it's live or on-demand webcasts, online training, lectures, or events, the combined value of streaming video with synchronized presentation materials such as PowerPoint slides or electronic whiteboards is tough to beat. But what is the best way to deploy streaming multimedia for your organization? What kinds of deployment options are available? What do you need to consider?

Multimedia streaming has typically been deployed almost exclusively with on-premise solutions. Recently, though, a growing number of options have become available in which you can leverage a service-based approach (Software-as-a-Service, or SaaS) to streaming multimedia. Depending on the structure of your organization, the resources you have available, and where you are in terms of streaming maturity, you may decide to use one, the other, or even a combination of both to achieve your streaming objectives.

GETTING SAAS-Y

Regardless of which type of delivery method you ultimately choose, some type of multimedia encoding appliance or software is necessary where the content is being presented. This gives AV staff the control they need to define settings that ensure a quality recording.

The recorded content is then uploaded to the service provider, which hosts the content as well as provides a centralized software solution for streaming, securing, and managing that content. In other words, your AV staff encodes on site and then uses web-based management components hosted by the SaaS provider — often reducing the impact to your IT infrastructure.

COMMON COMPONENTS OF STREAMING

Whether on-premise at your organization or through a service provider, a comprehensive solution to streaming multimedia content supports the publishing, securing, and management of content after it is encoded. To support that full lifecycle, you generally need the following:

- **Streaming server:** To stream content live or on-demand over the internet
- **Database server:** To store all metadata for the content
- **Web/content management server:** For managing content, access control, reporting, and publishing
- **Directory management server:** For seamless user authentication and controlled access to content

What comes to mind when you look at that list? Depending on your role and experience, you may be thinking, "Wow, that's a lot of stuff! Do I have the right people to manage all of that?" or quite possibly, "Do I *want* to manage all of that?"

WHEN TO KEEP IT IN HOUSE

There are certainly times when keeping your multimedia streaming solution in house is going to make sense. Here are a few general examples of when it might make sense to set up the infrastructure (discussed above) on premises at your organization.

Are You Ready to Go Organization Wide? If you realize the benefits of streaming multimedia and are ready to take those benefits across the entire organization, it can make perfect sense to set up and manage your



solution on-premise. The best scenario in this case is if you have the ability to leverage central resources and staffing for multiple parts of your organization. Of course, this requires that you have the budget for IT hardware as well as qualified personnel available and willing to help. If all of this fits you, it may be smart to bring it on-premise.

Does Your Content Need to Stay Internal?

Another good case for an on-premise solution relates to where your content will be consumed. If most of your content is never leaving the (fire)walls of your organization, and especially if it needs to be secured for specific internal users, it may make sense to stay on-premise with your solution. One factor here is how much content you plan to create. For limited content creation/publishing, it may not make sense to invest in infrastructure that is beyond the true needs of your organization. Think carefully about your return on investment and what the switching point may be. You can always start with a hosted service model and switch over to on-premise when the time comes.

Is Crossing Over an Option? In some cases it makes sense to start with SaaS and then cross over to on-premise. Sometimes, the internal network isn't quite ready to handle the streaming demands of their audiences. Other times, users simply want to get up and running quickly and leverage a hosted solution for their immediate needs while at the same time implementing a full-scale, on-premise platform. In still other cases, customers may not have budget for on-premise, so they opt for a hosted solution due to the lower upfront costs. Then, when they have the money, they set streaming up internally.

SCENARIOS FOR STREAMING SERVICES

On the other hand, many users want nothing to do with managing another database or a streaming server. One of the greatest challenges with streaming solutions is that they invariably mix AV with IT. Each group has their individual strengths and skills, and each can also have a different perspective on what's important. Working seamlessly together can be a challenge. And sometimes SaaS can help with that.

Here are a few examples where leverag-

ing streaming services can be a smart move.

Do You Need to Start Streaming Yesterday? If you are just getting started with streaming in your organization, it may make sense to test the waters by leveraging a streaming service provider. The benefit here is that with some providers you can literally be up and running in minutes. How quickly do you need to get started? Yesterday? Go SaaS.

Do You Lack the Infrastructure? If an organization has specific streaming needs and would like to avoid the additional impact on IT administrators or the costs of setting up infrastructure, then SaaS can be an extremely attractive option. This allows control of everything you need to manage

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the multimedia content without the additional strain on other parts of the organization (like the IT department).

Is Your Content Externally Focused? If most of your content is being consumed by audiences outside of your organization, it can make a lot of sense to use a provider that has a solid infrastructure (bandwidth) already in place and can quickly manage growth or even specializes in large, live events. This may be especially relevant if you are sharing a lot of content with other organizations, or if your audiences are globally dispersed. You can rely on the service provider's infrastructure to ensure solid performance and reliability, and you can focus on simply recording the content.

Do You Require Flexible Billing Options? In some ways it's all about the money, isn't it? Whether you're paying for software, hardware, and personnel to manage it your-

self, or paying for a provider with the complete solution, SaaS can offer attractive billing options in terms of paying as you go and reducing heavy upfront costs. Of course, this will vary from vendor to vendor, but many are willing to work with you to determine the billing cycles that are best for your organization. Don't be afraid to ask.

Will You Be Streaming Infrequently? If you need to stream multimedia content every now and then — maybe for special guest speakers, a quarterly executive briefing, or perhaps a conference — you might consider engaging with an event streaming service provider. Some companies offer a complete turnkey solution to capturing and streaming events, including all the staffing, AV equipment, hosted streaming, and content management services for your event.

MIX AND MATCH

There may be times when your organization has ongoing streaming needs that fit into the “keep it in house” category, but then the occasional need arises where you have a one-off event requiring more horsepower (support for a large number of concurrent users, load balancing, etc.) than your current infrastructure can support. There is no reason not to use a service provider for that one-off event while maintaining your own on-premise solution for your day-to-day streaming needs. Use the right tool for the situation. One is not mutually exclusive of the other.

STICK TO WHAT YOU DO BEST

In the end, your approach to streaming multimedia should be one that allows you to focus on what you do best. That's really a large part of the argument for services. Some organizations may have personnel who are very good at recording content. Others may be good at setting up and managing the IT infrastructure to support that. Your level of interest and current capabilities in managing the streaming infrastructure, along with the other points made in this article, should help you determine which path — on-premise, services, or both — leads the way to your multimedia streaming success.

[Source: *Sonic Foundry*]

A man with glasses, wearing a dark suit jacket, a yellow shirt, and a yellow and black striped tie, is smiling and looking towards the camera. The background is blurred, suggesting an office or professional setting.

In our work, there is
no chance to redo.

Mediasite by Sonic Foundry is first to mind when we hear streaming media. We capture live from web cams to international videoconferences all the way to broadcast quality video with just one operator, a Mediasite Recorder and no post-production. All things being equal, you plug it in and you know Mediasite is going to work.

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