






Wowza Streaming Engine™: On-Premises Deployment Examples















On Premises: Run Wowza Streaming Engine on one or more computers at your physical location, on your hardware, across your Internet connection.

	Few Inputs, Few Viewers	Lots of Inputs, More Viewers	One Input, Lots of Viewers	Lots of Inputs, Lots of Viewers	Other Scenarios
					
Approx. Input Count (# of live streams)	<ul style="list-style-type: none">Up to 100 inputs with limited recording and no transcoding (VOD requires additional hardware)Up to 2 transcoded inputs	10 instances provide 70–105 transcoded SD (non-HD) inputs from IP cameras	Get 1 transcoded input from a video mixer †	35 transcoded HD inputs from satellite receiver	Do you need... <ul style="list-style-type: none">Support for industry-standard IP multicast trafficServer-side recordingInternational distributionConnections with CDNsVODnDVRDRMMore?
Approx. Reach: LAN (Estimated # of concurrent viewers)	Up to 800 viewers in one location or LAN segment, depending on network infrastructure.	10–100 viewers with unicast	Up to 15,000 viewers	Typically 10 internal viewers for Q/A monitoring	
Approx. Reach: Public Network (Estimated # of concurrent viewers)	<ul style="list-style-type: none">Up to 800 viewers for each 1 Gbps*Up to 80 concurrent viewers at 100 Mbps8 concurrent viewers at 10 Mbps	<ul style="list-style-type: none">Up to 1,000 viewers nationwideUp to 5 dedicated high-bitrate links for broadcastAdd more instances as audience size increases	<ul style="list-style-type: none">Up to 15,000 viewers nationwide (Each system must have five 1 Gbps network connections)Add more instances as audience size increases	<ul style="list-style-type: none">Reach up to 50,000 viewers nationwide ‡Add more instances as audience size increases	
Additional Requirements and Information	Video on demand (VOD): no limit on number of files. VOD output limited by storage performance.	Deploy a load-balancing solution for multiple instances	<ul style="list-style-type: none">Max. 10K concurrent connections per instanceMax. 5 Gbps output per instanceVOD: unlimited number of files. Storage performance limits output.Deploy a load-balancing solution for multiple instances	<ul style="list-style-type: none">Max. 5 Gbps output per instanceMax. 10K concurrent connections per instanceLive streams can be recordedDeploy a load-balancing solution for multiple instances	
Use Cases	Small enterprise, internal broadcasting, large church with single live input, community-college sports, etc.	Security cameras, traffic cameras, ski racing, weather cameras, etc.	Keynote speaker, small concert, large church, regional-college sports, etc.	Over-the-top TV, single-country OTT live TV, etc.	
Instances Required	Wowza Streaming Engine Instances Required: 1	Wowza Streaming Engine Instances Required: 10-15	Wowza Streaming Engine Instances Required: 2-5	Wowza Streaming Engine Instances Required: 15-25	
Purchase Information	Buy one Monthly Edition license and install as many instances as you need, or choose Perpetual Edition for a one-time fee. Add more instances as audience size increases. For more information, visit wowza.com/streaming-engine.				Contact us: sales@wowza.com 1. 888 . 778 . 7997 1. 720 . 222 . 4744
Notes	* Systems must be placed in major Internet data centers with 10 Gbps uplink or more (when each stream is compressed to less than 1 Mbps). † Input recorded to local hard drive for later playback. Need multiple bonded uplink connections for extra bandwidth and reliability. ‡ Recommended five 1 Gbps connections per instance. Use the system OS for bonding.				

This document provides approximate estimates and guidelines for a variety of issues, including the number of Wowza Streaming Engine instances appropriate for different use cases. These guidelines and examples are estimates only; your actual requirements and costs may vary. This document is not a statement or guarantee of minimum performance or results.

Wowza Streaming Engine™: Cloud Hosting Deployment Examples

Cloud Deployment: Stream your content from high-performance virtual machines hosted remotely. Works with virtually all cloud hosting services.

	Few Inputs, Few Viewers	Many Inputs, More Viewers	Many Inputs, Many Viewers	Lots of Inputs, Lots of Viewers	Other Cloud Providers
					
Cloud Provider and Instance Type	 EC2: m1.small	 EC2: m1.large	 EC2: m1.xlarge	 C3.8XLarge	<p>Wowza Streaming Engine can also be deployed on the following hosts:</p> <p>Microsoft Azure</p>  <p>Google Cloud Platform</p>  <p>Rackspace the open cloud company</p>
Approx. Max. Network Performance	150 Mbps max. network I/O	350 Mbps max. network I/O	700 Mbps max. network I/O	1.73 Gbps max. network I/O	
Approx. Input Count (# of live streams)	<ul style="list-style-type: none">• Fewer than 10 inputs per EC2 instance*• Larger instance sizes recommended for transcoding	<ul style="list-style-type: none">• Fewer than 30 inputs per EC2 instance*• Larger instance sizes recommended for transcoding	<ul style="list-style-type: none">• Fewer than 50 inputs per EC2 instance*• Larger instance sizes recommended for transcoding	<p>Processed live inputs per EC2 instance:*</p> <ul style="list-style-type: none">• H.264 720p @ 5.588 Mbps: 7 can be transrated• H.264 1080p @ 9.720 Mbps: 5 can be transrated• MPEG-2, 720p @ 3.0 Mbps: 5 can be transrated	
Approx. Reach (Estimated number of concurrent viewers on a public network)	Up to 120 viewers per EC2 instance†	Up to 300 viewers per EC2 instance†	Up to 550 viewers per EC2 instance†	Up to 1,400 viewers per EC2 instance†	
Additional Information and Suggestions	For multiple instances, deploy a load-balancing solution	For multiple instances, deploy a load-balancing solution	For multiple instances, deploy a load-balancing solution	<ul style="list-style-type: none">• Outputs are assumed to be for 4 bitrates each (720p, 360p, 240p, 160p)• No transcoding	
Purchase Information	Cloud-Hosted Server Instance  Purchase directly from Amazon Marketplace			BYOL Wowza Streaming Engine Hosted  Buy a Wowza Streaming Engine license -AND-  Install it on an Amazon Machine Image	
Notes	<p>* Virtual system transcoder performance is limited by EC2 CPU resource limits</p> <p>† Virtual system output performance is limited by max. I/O</p> <p>For more detail about system performance for EC2, visit the Wowza forum thread EC2 Instance Performance.</p>				

Wowza and related marks are trademarks or registered trademarks of Wowza Media Systems, LLC. Third-party product names and related marks are trademarks or registered trademarks of such third parties. Use of third-party product names and marks does not imply any affiliation with or endorsement by such third-parties.