The CDN platform for service providers

OnApp CDN is a global content delivery platform for pure-play CDN companies, hosts, telcos, carriers and other service providers.

**CDN software and on-demand network**
OnApp CDN combines a full CDN software stack with the OnApp Federation, a global network of CDN capacity that you can tap into on demand, or use on its own.

You can build public and private CDNs across your own infrastructure, and add instant coverage at any mix of the 170+ locations on the OnApp Federation, spanning 113 cities in 43 countries.

**OnApp CDN for telcos and carriers**
Building your own CDN has many benefits: you can control traffic, protect your network investment and create new revenue streams from wholesale, OTT and retail CDN services.

With a full CDN software stack OnApp CDN deploys in your datacenters to create your own self-operated CDN. With the addition of public and private resources from the OnApp Federation provides many ways to create new revenue streams.

**OnApp CDN for hosting providers**
You can deploy OnApp CDN as an integrated part of your OnApp cloud, or together with a third party cloud management platform.

You get everything you need to create PoPs in your own datacenters and provision and manage your service. And you can add as much global capacity as you need using 170+ locations on the OnApp Federation.

**OnApp CDN for virtual service providers**
Using the OnApp Federation you can build your own CDN service without owning any of your own infrastructure.

With a single control panel (deployed locally, or hosted) you can combine Federation locations into a virtual CDN to meet specific market needs - for example, focused regional coverage, or high performance - and take it to market with zero capex.

**OnApp CDN for infrastructure providers**
You don’t have to sell CDN services to benefit from the OnApp CDN platform. You can contribute infrastructure too, and we’re always on the look-out for high quality PoPs to add to the Federation marketplace.

You simply deploy edge servers for http or streaming content, set your wholesale price and publish them to the Federation. You get paid when other providers use your capacity.
CDN features and protocols supported

OnApp CDN handles multiple content delivery techniques and supports a wide range of static and streaming content types.

**Supported protocols & content types**

**HTTP Push** - content is distributed proactively to edge servers in your chosen CDN locations. Push is normally recommended where file sizes regularly exceed 50MB, such as installers or game patches.

**HTTP Pull** - when content is requested by an end user, it’s pulled from the origin server to edge servers closest to the user. OnApp CDN supports multiple pull locations. Pull is often used for smaller files, such as website images, javascript, css and html.

**Live streaming** - OnApp CDN’s live streaming capabilities are enabled by Wowza Media Server 3, the leading high-performance media server.

- Adobe - RTMP / RTMPE / RTMPT
- Android - RTSP/RTP
- Flash - HTTP Dynamic Streaming (HDS)
- Apple – HTTP Streaming (HLS) for iPhone, iPod, iTouch
- Microsoft – Smooth Streaming for SilverLight

**Video on Demand** - deliver video with YouTube-style features like fast forward and rewind:

- HTTP Pseudo Streaming support includes FLV (Flash Video - .flv) and MP4 (QuickTime container - .mp4, .f4v, .mov, .m4v, .mp4a, .3gp, and .3g2)
- H.264/AAC content in MP4 container files can be delivered to any supported player
- Playback is up to 1080p
- Uses Nginx to serve videos through normal http

**Video on Demand is available for:**

- Adobe® Flash®
- Apple® iOS: iPhone®, iPad®, and iPod® touch
- Microsoft® Silverlight®
- Apple QuickTimeTM
- AndroidTM, Blackberry® & other 3GPP platforms

**Security & content control**

OnApp CDN protects your customers’ content, and helps them to implement their own content delivery policies. It includes:

- WAF and LetsEncrypt support
- Link encryption for Flash (RTMPS, RTMPE, RTMPT) - protect against content intrusion, unauthorized diversion and stream ripping
- Secure Token - protect against spoofing threats such as those posed by streaming media interceptors
- Geoblocking - restrict the availability of content to end users in specific locations on an include or exclude basis
- Secure Delivery (SSL) – supports vanity and shared SSL certificates to protect content delivery, from the origin to the CDN, and the CDN to the end user
- Anti-leech protection for streams
- Hotlink prevention for content resources
- Flexible content routing rules

**Reseller functionality**

With OnApp CDN you can easily set up unique reseller control panels with tailored access to your own PoPs and Federation PoPs, and their own user rights and pricing.

**Monitoring & reporting**

All OnApp Federation edge servers are monitored 24x7 from four widely distributed locations. CDN bandwidth is monitored in real time too. OnApp CDN provides a range of reporting tools for CDN providers and their customers within the OnApp control panel.
Software & service components

Controller Server
The Controller Server hosts your OnApp CDN control panel and gives you, your customers and resellers an easy way to manage CDN services, from setting up edge servers and zones, to configuring CDN resources and security policies. The control panel is fully rebrandable, supports localization and has a full API.

Edge Servers
OnApp CDN includes an advanced edge server appliance that caches and distributes content. The edge server can be deployed on hypervisors in an OnApp Cloud, or on dedicated server hardware. In each case, edge servers are managed by an OnApp Controller Server, through the OnApp control panel.

Storage Servers
OnApp CDN lets you add dedicated storage servers to your CDN set-up. These remove the workload from origin servers and help to reduce latency and throughput bottlenecks, by pushing content stored across multiple locations.

Anycast DNS
OnApp’s global Anycast DNS service and routing engine is the intelligence behind OnApp CDN. Hosted by OnApp at datacenters around the world, it automatically directs content requests to the nearest CDN location, using DNS routing to reduce the number of network hops required, which is much faster than traditional DNS configurations. OnApp CDN also integrates with Google DNS and Open DNS.

OnApp Federation & OnApp Market
The OnApp Federation is a network of hosts and telcos who provide capacity for your CDN. It’s based around OnApp Market, a wholesale marketplace where service providers can choose capacity from the locations with the price, location, performance and SLA they need, and sell capacity back to the marketplace too.

Hardware requirements (for on-premise deployments)

<table>
<thead>
<tr>
<th>OnApp Controller Server</th>
<th>Edge Servers</th>
<th>Federation Edge Servers</th>
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</thead>
<tbody>
<tr>
<td>• Dual or Quad Core 2Ghz+</td>
<td>• Quad core 2Ghz+</td>
<td></td>
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<tr>
<td>• 8GB+ RAM</td>
<td>• 4-8GB+ RAM</td>
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</tr>
<tr>
<td>• 100GB RAID 1</td>
<td>• 100GB - 1TB RAID-0 disk</td>
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<tr>
<td>• 2 x Gbit NIC</td>
<td>• 1 x dedicated Gbit NIC</td>
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<tr>
<td></td>
<td>• Throughput: 100Mbps - 1Gbps</td>
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<tr>
<td>Storage Servers</td>
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<tr>
<td>• Quad core 2GHz+</td>
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<tr>
<td>• 8GB+ RAM</td>
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</tr>
<tr>
<td>• Disk: 1000GB (RAID 1/5/6/10 recommended)</td>
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<td></td>
</tr>
<tr>
<td>• 1 x dedicated Gbit NIC</td>
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</table>

To maintain quality of service in the OnApp Federation there are a few additional requirements to meet. Please contact us for more information.