# **EDGE CONTENT HOSTING**





Digital content is being widely used in businesses today from operations to customer engagements, to marketing activities. Corporation uses digital video to train their employees at branch offices. Nationwide commercial distributes software updates to thousands of remote devices. Enterprise renders large digital 3D files and distributes to branch offices for further processing. Retailers offer digital games, coupons, entertainment multi-media to their venue guests. However in real practice, there are always challenges to deliver high quality and large scale digital content to users at a distributed venue.

Digital contents are typically large in file size and commonly store at a centralized location, either at a public or at a private cloud. Accessing those centralized digital content from numbers of remote venue and/or large number of remote users can overwhelm Internet bandwidth at both central and remote offices. In addition, Internet with its best effort design is known to suffer from network latency, jitter, and even packet loss from time to time. This make delivering of businessmatter digital content from cloud to remote sites unreliable and sometime impossible. Yet, with increasing use of Virtual Reality (VR) and Augmented Reality (AR) digital content, Internet of Things (IoT), and Big Data, one can expect the problems will increase over time.

Relay2 Edge Content Hosting Service (ECH), a new service in Relay2 Service Delivery Platform, aims to help businesses to

#### **Traditional Method**

(content is retrieved over Internet)



#### **ECH Method**

(content is retrieved local at Venue)



overcome those challenges by building a cloud manageable digital storage at the network edge. It makes digital content store just one step away from users, right at Relay2 Service-Ready Access Point (SR-AP) at venue. Users access the content without going through Internet and consuming Internet bandwidth. It eliminates the network jitter, latency, packet loss of the Internet that can impact content delivery.

# **SERVICE OVERVIEW**

# CLOSER CONTENT MEANS FASTER, RELIABLE CONTENT REACHABILITY, AND BETTER CUSTOMER VENUE EXPERIENCE & EMPLOYEE PRODUCTIVITY

With ECH service, businesses can offer targeted content that can be access instantly and reliably by viewers/users. Guest at venue can enjoy movies without a long wait and experiencing buffering from time to time.

Event goers can download and play games offered at a venue instantly. Employee training has never been easier, accessing videos and tutorials, all with a simple click. HR can deliver company-wide corporate videos reliably to remote staffs and ensure corporate messages are at their staff's finger tips.

Public transportation, buses or train, can deploy movies that can be access quickly and view seamlessly. In the event of a disaster, a content creator for a disaster public website can provide a standalone digital media distribution station that user can simply connect and obtain valuable time-sensitive information, even if there is no Internet connection.

# ENABLING BUSINESSES WITH VENUE TO TURN THEIR BUSINESS PHYSICAL ASSET TO DIGITAL ASSET

ECH service also allows businesses to assign access to 3rd party partners, such as magazine publisher, media company and education content provider, etc. This allows the assignee privileges to upload and manage their content at the venue for guest access. This can greatly enrich the digital service offering for the businesses at venue, not only increasing the end user satisfaction, but also being able to generate new sales opportunity.

# DRIVING HIGH ROI FOR YOUR WIFI NETWORKS INVESTMENT

ECH service is built on top of Relay2 Cloud WiFi Networking services. By coupling the two services together, WiFi networks are not just about providing connectivity for guests. It also offers reliable, enhanced customer experience, and targeted content delivery. Whether you're a small or large business, having the ability to control what your user views when they're connected provide ways of generating monetization such as advertisements, channel marketing, and paid content.

#### **EASY AND SIMPLE TO ADOPT**

ECH service is designed with an easy-to-use interface for business users while empowering IT admins with flexible administrative control.

ECH service provides a simple and drag-and-drop content management interface and role-based access control architecture that enables closer collaboration among multiple parties. For example, the IT admin of a venue can provision the digital content resource for the venue and control how a 3rd party content owner or manager can use the digital content resource. The content manager can manage digital content anytime from any place within the authorized framework without involving IT. This ensures that all parties focus on what they do best, delivering the most up to date content effectively and efficiently.

Based on Relay2's Service Delivery Platform which integrates edge computing/storage, web based cloud management and high performance WiFi access, ECH service simplifies IT operations & management. Through a centralized cloud platform, a customer can push their business and location related digital content to the designated network edge computing nodes anytime and anywhere.

# **CUSTOMER VALUES SUMMARY**

- Ensure Fast, Quality of Content Delivery to Drive Intent Business Results
- Guarantee Content Access Continuity Even During Internet Service Interruption
- Create New Sales Opportunities with Enriched Digital Offering at Venue
- Enable 3rd Party Content Provider Greater Viewership as well as Targeted Content
- Improve Customer Retention with Superior Content Viewing Experience
- Increase WiFi Investment ROI Without Additional Hardware
- Simplify IT Operation & Management for Content Delivery
- Reduce Internet Bandwidth Load and Save Expense

# **FEATURE HIGHLIGHTS**

# **Fast & Reliable Edge Content Access**

### **Web Content Caching**

Allow businesses to cache common accessed Internet web pages at SR-AP, closer to users for fast web content access

#### **Digital Content Hosting**

Host business-matter content at venue, in remote offices enhancing guests', and remote employees' content access experiences

# **Local Domain Name Service for Cached & Hosted Content**

Resolve cached web domain name and Space domain name to support content access continuity even when Internet connectivity is down

# **8GB and 128GB Content Storage Options**

8GB SSD and 128GB SSD options for different edge content usage needs

# Simple & Easy Management Interface

#### **Centralized Cloud Management**

Manageable centrally via an elastic, scalable hosted cloud from anywhere, anytime, using web browser

#### **Drag and Drop Content Management**

Simple, easy to use GUI to upload, remove, sort, and manage content for business users to use at day one

#### **Built-in Content Landing Page Template**

Offer template to easily and quickly build a content landing page

# **Content Usage Statistic Visualization & Report**

View and monitor content usage and generate usage report to facilitate content consumption analysis, billing management, and troubleshooting

# **Flexible Content Management**

#### **Multi-Tenant Content Management**

Enable venue to support up to 8 edge Content Spaces for 3rd parties and venue itself

#### **Edge Content Space Access Control**

Empower business IT to control ECH Space and Channel access rights for 3rd party entities and business's own content managers

#### **Schedule-Based Web Cache Refresh**

Update web content based on a specified schedule to keep content up-to-date automatically

#### Schedule-Based Content Access

Allow content managers to control when content can be accessed (displayed), such as during an event but not prior

#### **File Format Selection for Web Cache**

Cache web content with file matching only specified file formats to optimize edge content storage usage

# Secure, Scalable WiFi Networking Integrated

# **Integrated WiFi Access Point**

Built with WiFi network services to reach viewers via widely available WiFi networks

#### Connect up to 60+ Quality Video Sessions

Scalable WiFi networks supporting up to 60+ quality video sessions

#### Connect up to 252 clients

Scalable WiFi networks supporting up to 252 mobile user connections

# Support WiFi WAP2, 802.1x, TKIP, AES Encryption

Support industry-standard, strong wireless authentication and encryption options

### **ABOUT RELAY2**

Relay2, a leader in cloud-managed edge computing and wireless networks, helps service providers transform legacy managed services into complete ROI-generating business solutions tailored for SMB, distributed enterprise, and commercial. Relay2's pioneering Service-Ready Access Point enables cloud-managed applications and content to be hosted at the network edge, as close as possible to mobile customers, guests, and employees.