

## Classview System Specification

### General:

- ClassView products are provided using a popular Cloud-Based Solution
- Multiple classroom devices/operating systems are supported: iOS, Chromebooks, and Browsers

### Typical Classroom:

- 30 users or less per classroom (typical) or as allowable by school infrastructure
- 1 lead teacher per classroom with support for multiple co-teachers

### Recommended Network Bandwidth: Per Classroom

- 801.11ac or 802.11n (5GHz spectrum recommended)
- 1.5Mbps per user (Peak)
- 750Kbps per user (Nominal)

### Supported Devices and Browsers:

- Google Chromebooks
  - Chrome OS 67.x or later (Official Build - 64bit)
  - 1.40Ghz Processor
  - 2GB RAM /16GB Storage
  - Screen Size: 10.1"
  - Recommended resolution: 1366 x 768
  - User Interface: trackpad or mouse are recommended
- iPad Minimum Requirements
  - iOS 12.x or above
  - iPad 4+ (Recommended 9.7" device)
  - 16GB Storage
- Browsers:
  - Google Chrome™ version 90 or later (32/64-bit Windows®; 64-bit Mac OS® X)
  - Mozilla Firefox® 60 or later (32/64-bit Windows; 64-bit Mac OS X)
  - Safari® 9.x, 10.x, 11.x, 12.x, 13.X (64-bit)
  - Edge (32/64-bit)
    - Internet Explorer 10/11 and Safari browsers do not work with assignments that require microphone access.

### Projector:

- Projection Resolution: 1024 x 768

- Workstation Connected to Projector: any device that runs a supported browser

**Cloud Resources:**

- Amazon (AWS) - See list below for all IP's that AWS uses
- <https://www.google.com/analytics/web>

**Web Services: (Whitelisting and filter configuration - allow for both HTTP & HTTPS)**

- Ports 80 and 443.
- Required Universal Resource Links, (URL's)

Text Help	*.speechstream.net
EasyBridge: Where Are You From (WAYF) EasyBridge: Link to ClassView Platform	*.pk12ls.com
Google Analytics	*.googleapis.com

- Cloud based server Top Level Domains (TLD) hosted by Amazon AWS:

Content Server (Option A - Device to Cloud) (Option B - Content Server to Cloud) Note: Content Server is designed to support only native devices and has no effect on the web clients.	*.d3etodn1cqduv.cloudfront.net
AWS Elastic Load Balancer (For all Web Services)	*.bts19-production-1421833191.us-east-2.elb.amazonaws.com
Production URL (For all Web Services)	*.production.classviewapi.com
AWS S3 (Content, app updates, ClassView docs, etc.)	*.amazonaws.com

For those districts that requiring IP based filtering, Amazon publishes the following guide with an associated json file to be used with your content filters.

<http://docs.aws.amazon.com/general/latest/gr/aws-ip-ranges.html>

We do not recommend implementing IP address rating filters since IP's are frequently re-distributed and ratings can generate false positives. Optionally, we suggest filtering by host headers especially for content as shown in the System Requirements. Unlike IP's, Host headers are owned by the trusted hosting provided under management by Amazon Web Services CloudFront.

\* These specs are recommended and not required since app performance depends on many environmental factors such as bandwidth, density of users, clearing of cache, etc.