



# CONNECTING STUDENTS TO KNOWLEDGE

## IMPROVING EDUCATION EVERYWHERE

To deliver the learning experience required in today's world, e-Learning tools and instant access to digital content are key. The C3 Micro-Cloud is the leading solution to dramatically simplify and manage the delivery of digital content and e-Learning capabilities to schools, regardless of infrastructure challenges or internet connectivity limitations.

The C3 Micro-Cloud offers a range of powerful capabilities making it easy for students, teachers, and administrators to curate, publish, manage, and consume content. All delivered in a framework that is both powerful, flexible, and customizable.

## THE C3 MICRO-CLOUD IS COMPRISED OF:



C3 MICRO CLOUD

The C3 Micro-Cloud is a local appliance that provides a complete cloud-based environment in a small footprint. It creates a safe network environment with a local content repository and e-Learning tools. When Internet is available, the C3 Micro-Cloud manages, filters and optimizes connectivity. Each C3 Micro-Cloud can be managed by the C3 Cloud Control for content curation, distribution, and management.



C3 CLOUD CONTROL

The C3 Micro-Cloud is a complete, end-to-end software solution spanning the local micro-cloud (for classroom and school functions) to the central Cloud Control (for content curation, distribution, and management). It creates a safe network environment with a local content repository and e-Learning tools. When Internet is available, the C3 Micro-Cloud manages, filters and optimizes connectivity.



FOUNDATION LMS

The C3 Micro-Cloud comes with Foundation LMS, a basic learning management system which provides student and teacher resources to enable the e-Learning experience. For more advanced requirements, the C3 Micro-Cloud ships with Moodle - a leading LMS - to allow more advanced implementations of the e-Learning experience.

## THE C3 MICRO-CLOUD PLATFORM

### Enabling e-learning in non-connected environments



Plug-and play Micro-cloud: easy to use in any scenario



Wi-Fi Access Point to allow easy access to Locally cached resources



Compatible with notebooks, desktops, tablets, mobile phones



Access your digital content instantly into C3 local repository



Enable real off-line e-learning with the integrated LMS



Optional battery available (up to 5h)

### Enhancing connected environments



Manages remotely hundreds' schools from a central dashboard



Filter & Control Internet access by profile, controlling which sites can be accessed



Accelerates Internet speed with intelligent dynamic caching (videos/pages)



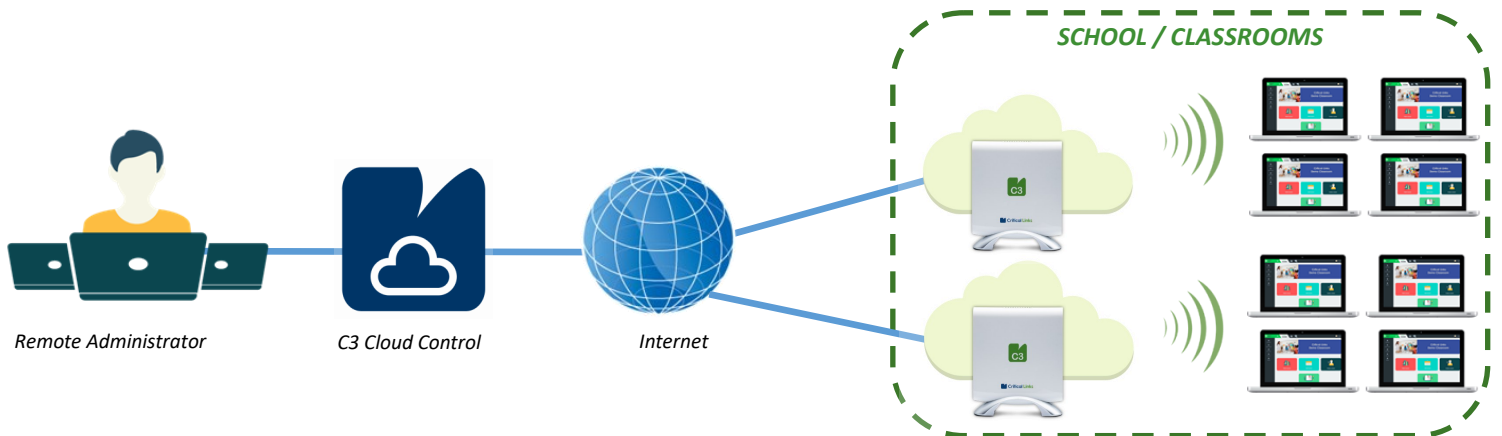
STEM: Enable an Closed loop education environment

## HOW DOES C3 MICRO-CLOUD WORK?

The C3 Micro-Cloud integrates cloud-based content, curation, and management with a local point of presence. The result is the power of cloud-based e-Learning even in locations that may not always have internet access:

## END-TO-END SOLUTION ARCHITECTURE

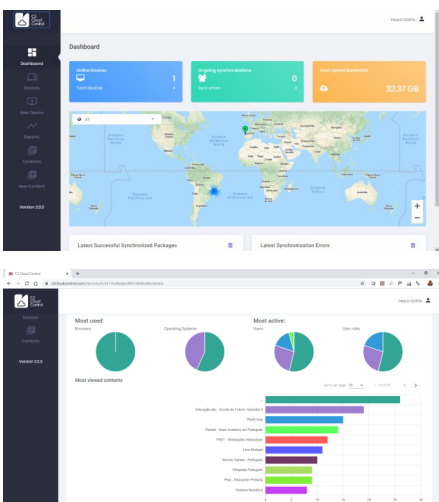
1. The C3 Micro-Cloud provides a local wi-fi access point, so that students and teachers can connect directly with the micro-cloud device and access all applications, services and content directly, even if 'upstream' network services are not available.



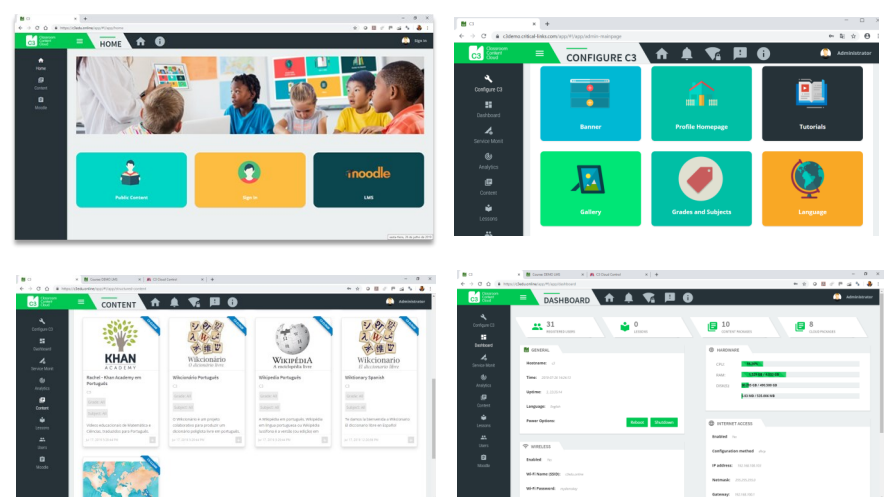
2. Content, in the form of texts and other resources, can be centrally curated in the C3 Cloud, and distributed to any authorized C3 Micro-Cloud whenever a network link is available. In addition, added value resources such as those from approved HTTP and HTTPS web sites can also be included in the local repository - again to be available even if the upstream network is down. Teachers can also load their own content locally, for use with their students - for a more customized learning experience.

3. With the C3 Cloud Control, not only can content and resources be managed centrally, but so can administration and management. Security policies, usage policies, user access levels - all can be managed centrally for an entire region/country of authorized C3s, to ensure uniform compliance and education throughout the entire system.

### C3 Cloud Control Screenshots



### C3 Micro Cloud Screenshots



## PRODUCT PORTFOLIO

C3 Classroom



C3 Hybrid



C3 School



### Features

	C3 Classroom	C3 Hybrid		C3 School
Dimensions	18.3 x 19 x 2.8	18.5 x 4.4 x 19.7		17.5 x 36 x 43.5
Storage	120GB to 1TB SSD or 500GB to 2TB HDD	120GB to 1TB SSD or 500GB to 2TB HDD		1 to 2TB HDD
RAID support	_____	_____		Optional
Embedded Wi-Fi Access Point	bgn/ac	(Optional bgn/ac)		_____
Intel processor	Celeron	Celeron	Core i3/i5/i7	Xeon
Supported concurrent users	Up to 50	Up to 50	Up to 250	Up to 1000
Ethernet WAN Interface (1GB Ethernet)	Yes	Yes	Yes	Yes
Ethernet LAN Interface (1GB Ethernet)	_____	Yes	Yes	Yes
Mobile interface (3G/4G)	Optional	Optional	Optional	_____
Battery backup	Optional	Optional	Optional	_____



### Learning Features

Digital Content Repository	Supports any type of content (static web sites, Office files, PDF, video, audio, images)
Offline Wikipedia	Wiki type of content (encyclopaedia, dictionaries, etc.)
Video Caching	Download video from URL for offline viewing
Pre Loaded Content	Project specific or publicly available content can be preloaded at manufacturing
Lesson planning	Teachers can aggregate related content packages in class specific lessons
Learning Management System	Interactive LMS based on latest Moodle version



### Administration Features

Local Network & Domain	Creates a local network for teachers and students with: Active Directory compatible domain, DNS, DHCP
User Authentication	Support user authentication with local or remote single sign-on capability
Profile Management	Support profile management with preconfigured standards for administrators, teachers, students and guests
Customizable Interface	Organization or school configurable logos and color branding
Landing page	Configurable landing page per user profile (e.g. Student page; Teacher page)
3rd party applications	Easily add additional applications (Docker or VM)



### Internet Features

Internet Gateway	Routes and controls Internet bound traffic by profile
Internet Caching	Optimizes Internet usage by caching HTTP and HTTPS requests
Whitelisting	Optionally filters and limits Internet access by user profile
Firewall	Protects access to C3 applications from outside users
C3 Cloud	Centralized dashboard for content management and distribution to C3 appliances
Cloud VPN	Enables easy access to C3 for remote management/troubleshooting
Online updates	System software updates from Critical Links managed update center