





### 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 Critical Links C3™ (Classroom Content 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™ solution 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™ SOLUTION IS COMPRISED OF:



# C3 APPLIANCE

The C3 solution 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 manages, filters and optimizes connectivity.





#### C3 CLOUD CONTROL

Centralized cloud service that allows remote administration and curation of C3 devices deployed at schools. The C3 Cloud Control enables e-Learning worldwide, with a centralized point for content and policy management. An authorized C3 Cloud Control instance can be resident either in a private (datacenter) or public cloud environment.





#### **FOUNDATION LMS**

The C3 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 ships with Moodle - a leading LMS - to allow more advanced implementations of the e-Learning experience.





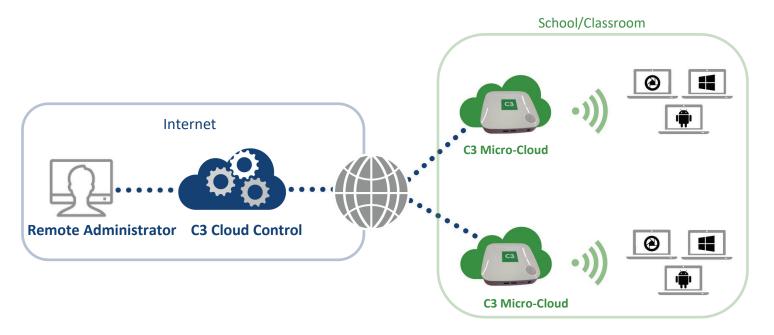




# **END-TO-END SOLUTION ARCHITECTURE**

The C3 solution integrates a 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:

- **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 Control service, 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™ PRODUCT PORTFOLIO**

		C3 Classroom	C3 Hybrid		C3 School
C3 Appliance Models & Features	C3 Model	СЗ			San
	Dimensions (cm)	15.3 x 15.3 x 3.9	18.5 x 4.4 x 19.7		17.5 x 36 x 43.5
	Storage	60 to 480GB SSD or	60 to 480GB SSD or		1 to 2TB HDD
		500GB to 2TB HDD	500GB to 2TB HDD		(Optional RAID )
	Embedded WiFi Access Point	bgn or bgn/ac	Optional (bgn or bgn/ac)		-
	Intel processor	Celeron	Celeron	Core i3/i5/i7	Xeon
	Supported users	50	50	100 to 200	200 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)			
	Off line Wikipedia	Wiki type of content (encyclopedia, 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 adds additional applications (Docker or VM)			
Internet Features	Internet Gateway	Routes and control Internet bound traffic by profile			
	Internet Caching	Optimize Internet usage by caching HTTP and HTTPS requests			
	Whitelisting	Optionally filter and limit Internet access by user profile			
	Firewall	Protects access to C3 applications from outside users			
	C3 Cloud Control	Centralized dashboard for content management and distribution to C3 appliances			
	Cloud VPN	Enables easy access to C3 for remote management/troubleshooting			
	On-line updates	System software updates from Critical Links managed update center			







Website: www.empiresynergy.co.bw



