

C3 MICRO-CLOUD - FAQ'S



What is a micro-cloud?

A micro-cloud is a completely self-contained but cloud-enabled e-Learning environment that allows students and teachers access to cloud-based learning management systems, curriculum, content, and resources – even when the school has no connectivity or power. With this approach, the learning infrastructure, as well as the curriculum, content, and resources are staged on the micro-cloud platform in the school. Students connect on a local Wi-Fi that appears to be an internet connection, hence the ability to use a cloud-based e-Learning paradigm even if there is no internet connection or even without power. Valuable learning resources (such as YouTube videos, simulations, interactive maps, learning games, educational apps, Wikipedia content, etc.) are housed locally in the micro-cloud. In this scenario, students progress through the learning process even if there is no internet connectivity to the school at any point in time. Most importantly, hundreds or even thousands of micro-clouds throughout the region/country can be managed and administered from a single, centralized point.

C3 MICRO-CLOUD:

Millions of students can't reach the global knowledge and resources that e-Learning can provide.

The C3 Micro-Cloud changes all that – anytime, anywhere.

The C3 Micro-Cloud is a self-contained, cloud-enabled e-Learning platform that can dramatically simplify the delivery of digitized content to schools.

Everywhere.

Irrespective of the constraints on internet connectivity and power, availability of technically skilled personnel, school location (urban or rural), or the specific student devices.

What added value does the C3 Micro-Cloud ecosystem bring to the classroom?

Success in learning in the 21st century is all about discovery, and teachers should mentor students to be able to find and acquire new information, and to apply it in smart and creative ways. However, to deliver the learning experience required in today's world, e-Learning tools and instant access to digital content are key. While in many countries, children are just a quick Google search away from answers, others are located in more challenging environments that lack advanced infrastructure, and the use of technology is rare. Students with unfettered access to the internet have unfair competitive advantage over those who don't, and this is likely to be reflected in their future professional lives. With the **C3 Micro-Cloud** it becomes possible to bridge that inequality, by giving them access to the latest information and resources, including advanced learning aids and content. Teachers can leverage advanced teaching tools and curriculum management systems for their students, even if they do not always have an upstream connection to the internet.



How does the C3 Micro-Cloud enhance collaborative work between students and teachers?

The **C3 Micro-Cloud** has completely changed how teachers teach and how students learn. Having a micro-cloud in the classroom promotes the ability for collaborative work

between them; students can ask questions, discuss different topics, and help each other learn in a safe online environment created by teachers. They are able to follow state-of-the-art teaching methods, leverage leading curriculum and experience rich media content every day – even if, they do not always have an 'upstream' network connectivity – giving instant access to knowledge and keeping them engaged and motivated.

My school does not have internet connection; how would the C3 Micro-Cloud fit in my environment?

The **C3 Micro-Cloud** can ship with a pre-populated local content repository and powerful e-Learning tools to be ready to use 'out of the box'. Teachers and students connect via Wi-Fi to the local micro-cloud and they have access to a complete cloud-based learning environment. If content such as texts, subject media, guides, tests, and other resources are cached on the micro-cloud, they are always available regardless of 'upstream' network connectivity. Even for schools without internet connectivity, the content repository can be updated via USB key whenever the school system administrators release new versions, updates, or content. It also has a battery backup which means students can learn without interruption, even when power is unstable or non-existent for a period of time. Updated and approved educational content, which can be curated centrally by approved administrators, is available at any time through the **C3 Cloud Control** portal. The **C3 Micro-Cloud** is now in use in over 55 countries, reaching more than 7 million students.

My school already has internet connection; how would the C3 Micro-Cloud fit in my environment?

Around the world, even schools with internet connection struggle with providing broadband

connectivity to the classroom for learning purposes. One of the major constraints these schools face is managing available bandwidth to balance cost and productivity; often learning pays the price in terms of no access, limited usage, or extremely poor performance that renders e-learning virtually impossible. The **C3 Micro-Cloud** provides immediate, high-speed access to both content and applications that are cached on the micro-cloud, reducing the need for constant downloads from the web while guaranteeing quick access to all the educational content. The **C3 Micro-Cloud** has integrated technology such as intelligent caching, whitelisting, bandwidth management, etc., that improves network efficiency, reducing the bandwidth consumption and improving the internet speed for the school overall.



Can I use my own digital content and resources with the C3 Micro-Cloud?

Yes. Teachers can import their own content, in formats such as videos, PDF, PowerPoint, and others. With the **C3 Micro-Cloud** teachers are able to follow state-of-the-art teaching methods and leverage leading curriculum, by providing a wide range of learning materials and promoting flexibility and differentiation in the learning methods.

They can blend the pre-loaded content with customized content of their own such as videos, PDF, PowerPoint presentations, etc., to add value to their classes, making them more dynamic and engaging.

What are some examples of digital content that comes with the C3 Micro-Cloud?

The **C3 Micro-Cloud** can come pre-loaded with a set of content that will make your classes more fun and dynamic, increasing student engagement. These include videos, educational games, simulations, and others. Some of the standard content includes Wikipedia, KhanAcademy, pHet Simulations, CK-12, and an assortment of learning applications such as MicroBit, WordPress, and Scratch. With the **C3 Micro-Cloud**, classroom walls will no longer be a barrier to knowledge!

If we have many schools, how do we keep them all in sync with the same content?

School administrators can curate their curriculum of rich learning content, and easily distribute that to all of their schools connected with the **C3 Micro-Cloud** – even the ones located in challenging environments. By using the **C3 Cloud Control** portal, any content updates can be applied to authorized micro-clouds on demand whenever they are able to connect to the internet and access the portal (even if this connection is intermittent). Not only can content and resources be managed centrally, but administration and management policies can be managed centrally, as well. Security 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.

Does the C3 Micro-Cloud offer an e-learning/LMS environment?

Yes, it does! To enable immediate adoption of the e-Learning process, each C3 Micro-Cloud is pre-loaded with an easy to use and simple to deploy learning management system (LMS) that ensures a rich, structured e-Learning environment immediately. Without unnecessary complexity, the included Foundation LMS (fLMS) is easy to use and adapts to anyone, even those who are not familiar with technology. It has a very simple interface and both teachers and students can access all the important content. This can save precious time and also helps in classroom organization efficiency. For those schools that need more advanced LMS function, Moodle is also included with each C3 Micro-Cloud.



KEY FEATURES:

- **Content Curation:** Allows teachers and administrators to provide structure to large amounts of content. It can be arranged by grade level, subject, etc. Free-form tags can be added to allow content to be easily found when needed. Lesson plans can be created and used by both students and teachers, and they can leverage the ability of fLMS to easily structure and assign content and class planning. Regular learning processes can be easily accomplished by teachers, using lesson plans that take advantage of structured, curated content.

- **Class Planning:** fLMS has several capabilities, such as planning lessons, giving out assignments, tracking results, as well as organizing and saving contents. The fLMS portal also has a feature that gives access to a Moodle Portal with different courses and a calendar to schedule exams or events. Your fLMS should be an essential tool in class planning and execution. Together these features can save time and allow teachers to focus on what really matters in the learning process. C3 Cloud Control also supports Active Directory and Azure Active Directory integration, allowing you to leverage global policies for users and resources to be applied anywhere in the world.
- **Learning Guide:** fLMS is the student's constant guide through the learning process as to what is their next step, what resources are available to assist in their learning experience and to keep students and teachers 'in sync' with regards to the digital learning process. fLMS helps organize the learning process, creating simplicity in teaching and collaboration between all parties in learning. This includes not just teachers and students but also parents. Using fLMS as a learning guide makes digital learning easier and faster driving better results in any part of the world.

Everyone, in every part of the world can have access to the Foundation LMS e-Learning functionalities even if schools are located in a remote place without internet connection, poor infrastructure conditions or even if the school has no stable power.

Is the C3 Micro-Cloud compatible with Android Tablets? Which devices are supported?

Yes, it is. Users are able to access the C3 Micro-Cloud from any intelligent device, be it a

Will the C3 Micro-Cloud participate in our Microsoft Active Directory security and authentication schemes?

Absolutely. The C3 Micro-Cloud can function as a resource in your Active Directory (AD) domain, and be under the control of your main AD controls, policies, and procedures including authentication, security, and GPO policies. In this way, you can apply uniform authentication, security, and access controls to different classes of users throughout your network, ensuring the right users have the right access to the right resources at the right time.

It is necessary any special training to work with the C3 Micro-Cloud?

No, it isn't. The C3 Micro-Cloud was specially designed to be very intuitive, enabling its use by teachers/school administrators that have little-to-no technological skills. However, we have available a set of "how to" videos, which can help teachers, administrators, and even students learn to be more productive with their C3 Micro-Cloud. In addition, our users can feel free to reach out to our support team, who is always available to provide support or add clarity to questions.

Can the students access the C3 Micro-Cloud / LMS outside the school?

Yes, they can! If configured by the school system, students can have remote access by logging into a centralized C3 Micro-Cloud instance that runs in the cloud, with identical content/curriculum.

This is an optional configuration, which is being used in numerous countries to allow a seamless hybrid learning experience.

What are the C3 Micro-Cloud Models available?

The C3 Micro-Cloud can be deployed either as an appliance or as a software build for customer-provided servers that meet the required specifications. If an appliance footprint is desired for ease of deployment, there are three different models available:

- **C3 Classroom (C3-C):** Designed for individual classroom use. Accommodates up to 50 concurrent students
- **C3 Hybrid (C3-H):** Designed for clusters of classrooms, or small schools. Accommodates up to 300 concurrent students, and includes additional network interfaces and LAN network interface (GbE)
- **C3 School (C3-S):** Designed for an entire school. Accommodates from 300 concurrent students and has LAN interface (GbE).

With the C3 Micro-Cloud classroom walls no longer be a barrier to a technology based future!

distributed by:



The C3 Micro-Cloud is developed and maintained by

