



# *Migrating a Market- Leading Scheduling And Space Management Solution For Education Institutions*



**▶ CUSTOMER**

CollegeNET

**▶ SECTOR**

Education

**▶ COUNTRY**

USA

**▶ CHALLENGE**

To take advantage of several business and technology trends to improve the product and stay ahead of competitors

**▶ RESULTS**

- **Cloud and Software-as-a-Service:** Many new customers want Series25's functionality without the cost and complexity of on-premise implementation. Both new and existing customers are often keen to hand off operation so as to concentrate on their core business. As an IT services company, CollegeNET was well positioned to host Series25 itself. Uniface made the transition to a hosted version in the Cloud straightforward
- **Web services:** Higher education establishments often need to integrate Series25 with internal and third-party systems. CollegeNET also saw that adopting web services would increase its own options for deployment of Series25
- **Web-based version:** CollegeNET's customers need an intuitive user interface and rapid deployment options, particularly as they are increasingly making the system available to faculty, students and visitors for self-service use. Having introduced web services, CollegeNET was quickly able to create a browser-based version of Series25, which can co-exist with the client/server version within a given installation
- **Mobile:** The adoption of web services has also made it relatively straightforward to produce a mobile version of Series25

## Introduction to CollegeNET and Series25

CollegeNET, Inc., based in Portland, Oregon, USA, provides software and IT services to over 1,300 higher education and non-profit institutions globally. Customers include several US Ivy League colleges, in addition to many of the largest public universities.

CollegeNET's Series25 product for scheduling and space management automates processes such as booking of classrooms, both on an ad hoc basis and for an entire course. It allows institutions to maximize efficiency and automate scheduling tasks that could take many weeks if performed manually.

A unique feature of Series25 is that it includes a tool (X25) that allows users to analyze their past usage of space. By using the X25 feature, important decisions about construction projects and building purchases can be based on the reality of how space is currently used, rather than guesswork, without the need to enter any data.

## Choosing Uniface – and Reaping the Benefits

CollegeNET originally chose Uniface to build the first version of Series25 products and has continued to write these products exclusively in Uniface. Customers have always benefited from features like database independence, which has made it possible to use Series25 in conjunction with the database that their IT policies, or other applications, dictated.

Uniface's productivity has benefited both CollegeNET and its customers by enabling an agile response to business needs. For example, the master planning application took only about a year to produce – it could have been five years with other tools in the market, estimates Tobi Macey, the company's Associate VP, Series25 Products.

A third vital feature of Uniface is the robustness and reliability of the applications produced with it. Institutions are heavily dependent on CollegeNET's solution for the smooth running of their courses and events and without it, students and visitors would not know where to go.

“Because we had chosen to write Series25 in Uniface from the word go, we were able to migrate to the web and Cloud seamlessly and with minimal recoding. Now Uniface is making it easy for us to support mobile devices too.”

Tobi Macey, Associate VP,  
Series25 Products, CollegeNET

## Mission-Critical Hosted Solution for Educational Institutions

The Uniface/CollegeNET partnership continues to prove successful. Series25 is now used by close to 800 organizations and tens of thousands of individuals.

More recently, the choice of Uniface has allowed CollegeNET to take advantage of several business and technology trends to improve the product and stay ahead of its competitors. These changes have included:

- Moving to Cloud hosting and Software-as-a-Service
- Adopting web services
- Producing a web-based version
- Providing mobile access.

## Straightforward Move to the Cloud

With the advent of Cloud computing, CollegeNET recognized an opportunity to provide Series25 on a Software-as-a-Service (SaaS) basis. For customers, this provides an easy and affordable alternative to the usual on-premise implementation. Customers have the advantage of always working on the latest release, experience nearly 100% up time and have access to online support. For CollegeNET, it reduces the support burden, since customers are sharing the same instance of Series25.

“Although the move to Cloud was cutting edge in industry terms, it was a natural move for us because other parts of our company were already Cloud-based – with established methods of securing data. We already had the infrastructure, knowledge and staff in place to manage the Cloud implementation of Series25,” explains Tobi.

From a technical point of view, the move was straightforward, Tobi says: “Migration to the Cloud was seamless – because of the way Uniface works, the architectural changes we had to make were minimal.”

## A Cloud Solution that Is Reliable and Secure

However, there was some initial skepticism on the part of customers – particularly their IT departments – about the use of Cloud – largely because of concerns about loss of control, systems reliability and data privacy. But this particular Cloud deployment is distinct in that CollegeNET provides hosting itself. “Because we host Series25 in a private Cloud, with our own hardware and software supported by our own IT staff, we are in complete control and our customers get a level of convenience – and of confidence about data privacy – that our competitors can’t provide,” Tobi explains. Through clustering, the Cloud solution provides greater resilience than on-premise options, she adds.

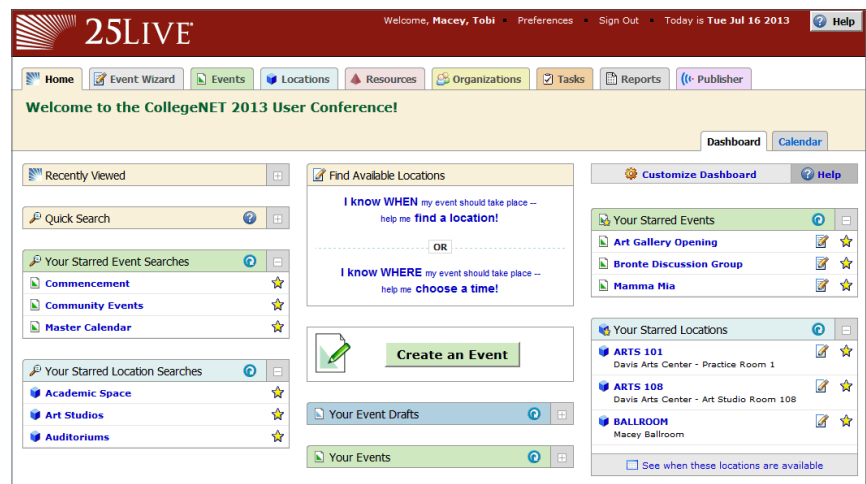
### 10 Ways Uniface Helps You Succeed

- #1 PRODUCTIVITY
- #2 RELIABILITY
- #3 SECURITY
- #4 INTEGRATION & REUSE
- #5 SCALABILITY
- #6 AGILITY
- #7 SUSTAINABILITY
- #8 TECHNOLOGY INDEPENDENCE
- #9 COMMUNITY
- #10 PARTNERSUNITED PROGRAM

Thanks in part to these assurances, customers' attitudes towards Cloud services turned around rapidly and by spring 2013 around 150 institutions were using the Cloud version. Interestingly, the formerly skeptical IT departments have often become the keenest advocates for Cloud.

Customers now have a wide range of implementation choices. The on-premise option is still available and customers who choose Cloud implementation can still deploy the client/server version via Citrix.

Series25  
Application



## Agile Response to Customer Requirements

Another benefit is that CollegeNET has not needed to change its licensing model to accommodate Cloud. A few years back they had already moved from licensing based on the number of users to the number of students in the institution, to reflect the fact that the web version would be used campus-wide. Today they use a flat site license, which includes a basic fee for implementation and then quarterly service fees. Customers get service level agreements, which include a guaranteed 99.9% up time and standard maintenance.

Apart from the cost savings and convenience of SaaS, customers are also attracted by the environmental benefits of Cloud deployment. Series25 was always a green solution in that it eliminated large amounts of paper. Through Cloud, it reduces resource use further, since customers share a data center and other assets.

Moving to Cloud and web deployment has made CollegeNET more agile in its response to customer requirements, Tobi points out. "We can now do releases every two to three months on just one installed instance, which means we can keep up-to-date with market requirements. Before we migrated to the web, it was more likely to be one major release every few years." The more frequent updates make life much easier for customers as the training requirements associated with incremental upgrades are smaller than for major releases.

### Benefits of Moving to the Cloud with Uniface

- No need to change licensing model as it was already based on the fact that a web version would be used campus-wide
- Reduce burden on support, as customers use one instance of application
- Fewer training requirements since updates and upgrades are generally smaller and more frequent
- Easy to adapt product to new requirements as architectural changes are minimal

## Ease of Integration with Uniface

Around 2005, customers were increasingly asking for easier ways to integrate Series25 with their other applications. CollegeNET realized that web services would be a way to satisfy that requirement. With Uniface, it was straightforward to repackage the existing logic in the form of web services.

The web services approach has, as intended, made integration easy for customers, since services can be invoked from third-party applications as well as from within Series25. The web services approach even allows external applications to push data into the Series25 database, applying the usual validation rules to ensure the integrity of the data. “Our customers don’t need to use SQL – they can get data in XML format and integrate it with third-party software on campus,” Tobi explains.

Series25 is able to integrate with other applications used on campuses using RESTful web services. Examples include:

- Interfacing with a facility management tool (FAMIS) used for maintenance of heating and cooling systems
- Integrating with displays outside a room (such as TVs, iPads or PolyVision screens) showing the schedule of daily activities taking place in a particular location
- Building a lighting system interface, where campuses can automatically turn lights on and off and make lighting schedules—leading to energy efficiency and automation of manual tasks.

## Impressive Productivity through Web Services

Tobi notes that the use of web services has increased the already impressive productivity that CollegeNET has achieved through Uniface. “Recently, a customer asked for significant new workflow functionality to support communication between stakeholders, and we were able to add that in a matter of weeks—including the build and testing by modifying an existing service.” A team of just three developers can support all of CollegeNET’s Uniface requirements including enhancements.

An additional benefit of web services is that it has made it easier for CollegeNET to adapt the product to other new requirements such as web based and mobile versions of the application, as discussed below.

“20 to 30 customer organizations have come across from competitors in the past two years, mainly attracted by Cloud and integration capabilities—so that success is in large measure down to our choice of Uniface.”

Tobi Macey, Associate VP,  
Series25 Products, CollegeNET

## Producing a Web-based Version

Another recent challenge was to satisfy customers' increasing need to make the solution available to occasional users, so, for example, that lecturers and others can book classrooms themselves. Self-service also implied a highly intuitive user interface. A web-based version to complement the client/server version was the obvious solution.

CollegeNET has now successfully migrated all the functionality of its client/server solution to the web version. Customers can use a mixture of client/server and web deployment. Typically, just a handful of specialist staff who control the use of spaces retain the client/server version, while the rest use the web version.

Regardless of the user interface, the database and back-end functionality are the same because the business logic is maintained in one place, and so customers can migrate at their own pace. CollegeNET has developed a robust security model within Uniface, enabling institutions to tailor functionality and data access to the needs of specific users, which means that customers can achieve their aim of making Series25 available for casual use with no threat to data integrity.

The web version has been a huge success, with many customers having made the solution available to tens or even hundreds of thousands of occasional users including faculty, students and visiting members of the public. In a real sense, these institutions rely on Series25 to represent them to the outside world.

## Providing Mobile Access

Recently, CollegeNET has started making functionality available on mobile devices. Tobi explains, “Because of our use of web services, it was fairly straightforward to add the mobile front end. Leveraging the business logic, it took one developer just a few months to create the first mobile release.”

Now 25Live, as the mobile app is called, allows users to view campus events and location availability — anytime, anywhere via smartphones and other mobile devices. There are obvious benefits for schedulers who need to make last-minute changes to courses and events quickly, and for attendees who can view calendars and make reservations on the go.

Comprehensive as this sounds, CollegeNET plans to enhance its mobile app further in the near future.



## A Future with Uniface

As CollegeNET and Series25 go from strength to strength, the company acknowledges that Uniface has made a major contribution to its success. Tobi says, “20 to 30 customer organizations have come across to us from competitors in the past two years, mainly attracted by Cloud and integration capabilities- so that success is in large measure down to our choice of Uniface.”

CollegeNET’s partnership with Uniface has been long-term and Tobi is confident it will continue to grow and strengthen. “It’s not just features like cross-platform support and web services that make Uniface great to work with – the people working for Uniface make the difference too.”





### *About Uniface*

Uniface, the most productive, reliable development tool in the industry, provides a model-driven environment for the rapid development of scalable enterprise mission-critical applications. Learn more at [www.uniface.com](http://www.uniface.com)

