Rosetta Stone uses Collaboration Services and the Adobe® Digital Enterprise Platform to build a next-generation language-learning solution that drives revenue and reaches new customers.

**Learning through immersion**

Anyone who has ever learned a foreign language knows the vast difference between completing workbook activities and speaking with others. Although speaking and interacting with other learners or native speakers is ultimately more rewarding and productive, it can be intimidating at first. Through language immersion and navigating real-life situations, students can learn how to speak and ultimately think in a different language.

This is the powerful concept behind TOTALe, a fully web-based, multiuser language-learning program from Rosetta Stone, one of the world’s leading providers of language-learning solutions. TOTALe features online coursework and live sessions with native-speaking coaches and other students, as well as access to Rosetta World, a web-based community with innovative language games. The advanced product is powered by Adobe Collaboration Services, an extension of the Adobe Digital Enterprise Platform (ADEP).

"With the integrated voice over IP (VoIP), streaming video, instant messaging, multiuser rooms, and other capabilities within the Collaboration Services, an extension of the Adobe Digital Enterprise Platform, we were able to get TOTALe up and running faster and accelerate our time to market," says Mike Fulkerson, senior vice president of technology and labs for Rosetta Stone. "Instead of taking months to glue together the collaboration technologies required, we were able to use the Adobe solution to create a working prototype of TOTALe's collaborative aspects in one month and start refining TOTALe based on our in-depth experience in developing effective language-learning solutions."

**Addictively engaging for users**

From a technical standpoint, Rosetta Stone selected the Collaboration Services based on the Adobe Flash® Platform for several reasons including Adobe's developer-oriented approach, which allowed the company to craft its own unique RIA versus being constrained by an off-the-shelf, fixed infrastructure. The Adobe solution also provides tightly integrated functions like VoIP and video, a complete software development kit (SDK) with ready-to-use components, and the ability to engage learners in highly interactive, dynamic discussions online—an important factor in TOTALe's collaborative games. In addition, the Adobe solution makes it easier for Rosetta Stone to customize its TOTALe learning platform to map to the company's brand standards for a high-quality, professional look and feel.

Users engaging with TOTALe can see different variations of screens for interactive, multiuser game play. For instance, in one two-player game, participants must work together to make both of their screens look identical by describing and arranging items in the language being studied. One user is the "descriptor" and the other is the "arranger." The descriptor's job might be to instruct the arranger to place a dog on a couch in a virtual living room where the describer might have just one dog. Unknown to the describer, however, the arranger might have several dogs to choose from—black, white, and brown, for instance—in his or her room and must ask the describer which dog needs to be placed on the couch.

Through instructions given to each other, the two participants ultimately produce similar scenes on their computer screens. The back-and-forth collaboration yields an immersive experience that not only promotes successful language learning, but also is addictively fun for users. This differentiated services approach is driving customer satisfaction for Rosetta Stone, as well as adoption and revenues.
With Collaboration Services, an extension of the Adobe Digital Enterprise Platform, Rosetta Stone is delivering TOTALe, a fully interactive online language-learning program that engages participants in live learning sessions featuring dynamic games and ongoing collaboration with native-speaking coaches and other students.

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"With many of our competitors’ solutions, users have to make small talk, which can wind up feeling uncomfortable and forced," says Fulkerson. "With Collaboration Services, an extension of the Adobe Digital Enterprise Platform, underlying TOTALe, we can create powerful experiences through interactive games that structure conversation and make learning fun and highly relevant."

**Fast development and distribution with few resources**

The engaging functionality supported by the Collaboration Services, an extension of Adobe Digital Enterprise Platform is not only attracting new users and creating new revenue streams for Rosetta Stone, but also has reduced development, maintenance, and support costs.

With the Adobe solution, Rosetta Stone created the all-new language-learning solution with a small staff. "From the first day we started building TOTALe to the first prototype game running on multiple machines was about a month, and that was with only a handful of developers," says Ori Ratner, software architect for Rosetta Stone.

By using an integrated collaboration service platform from a single vendor, Rosetta Stone is also reducing operational and support costs. Adobe’s hosted services infrastructure has helped the company reduce the burden on its IT staff. Instead of budgeting for the cost of installing, configuring and managing back-end servers, Rosetta Stone relies on Adobe for updates, maintenance, and hosting. Rosetta Stone can also scale TOTALe easily to accommodate customer growth. This approach minimizes risk and delivers faster return on investment. "Anything we can do in terms of moving our solutions to a trusted, hosted infrastructure is a huge help," says Andy Harbick, senior director of online product development. "By working with a cloud solutions provider like Adobe, we can lessen our burden while delivering relevant, scalable language-learning solutions to our customers."

Rather than having to work with multiple vendors offering different solutions for video, multiuser rooms, and the other collaborative components of TOTALe—not to mention building the custom code required to tie each piece together—Rosetta Stone can rely on a single, trusted vendor and reduce integration time and effort.

"Whenever you integrate multiple disparate components from different vendors together, it increases the risk of errors and the chances that things may go awry in production," says Harbick. "By working with a single vendor with an integrated solution for the collaboration functions in TOTALe, we benefit in terms of operational efficiency and quality."
Rosetta Stone is transforming the quality and interactivity of online language learning with TOTALe. Built on the Adobe Flash Platform, the rich internet application (RIA) enables Rosetta Stone to easily reach diverse student populations and offers a compelling online environment for learning and applying new language skills.

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Reaching a diverse audience
Because the Collaboration Services are based on the Adobe Flash Platform, Rosetta Stone can reach a broad, worldwide audience on multiple platforms. The Adobe Flash Player is already available on 98% of Internet-connected desktops worldwide, giving users on multiple platforms easy access to the new language-learning solution without cumbersome software downloads or the need for specialized plug-ins. And, for Rosetta Stone, the use of the Adobe Flash Platform translates into the ability to use the same code base across multiple different platforms, further reducing development costs.

"With the Adobe Flash Platform, we can use the same code for Windows as we can for Mac," says Ratner. "That is huge in terms of our efficiency internally, but also in terms of our ability to reach a global user base with minimal resources."

A platform for the future
With TOTALe, Rosetta Stone has built a successful new model for language learning based on unique interactivity and social media features. TOTALe also offers a solid foundation for Rosetta Stone to rapidly build and deploy additional advanced RIAs—one that consumes few internal resources and allows the company to take advantage of Adobe’s cloud computing infrastructure to alleviate ongoing IT staff burdens and reduce costs.

"As a next step, we plan to invent more social games for TOTALe," says Fulkerson. "Our aim is to create relevant, meaningful language-learning experiences. With the Adobe Digital Enterprise Platform as the foundation, we can rapidly build and deploy new functionality and products."