

ALCHEMY CATALYST Total Visual Localization

L10n Services in the Cloud

The Power of Community – building together

Abstract

This is a document outlining an innovative application of cloud technology within the Localization Industry.

Hosting products and services in the cloud is not new, but Alchemy CATALYST 10 aims to accelerate progress within the Localisation industry by presenting an opportunity to build on each other's experiences.

Using Alchemy CATALYST, users can now opt to download online assets from the cloud to increase efficiency and reduce time-to-market. Users also have the option to make certain assets available to others by publishing to the cloud. In this way, the software becomes a living entity with no limit on what the multi-lingual community can do for each other.

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EXECUTIVE SUMMARY

The cloud offers significant benefits to users of software. Gone are the days where software operates in isolated silos. Software can now embrace the cloud and facilitate plug-and play with online services.

Alchemy CATALYST does just that with some revolutionary new services available from the Support Team at Alchemy Software.

The advantages to a software product such as Catalyst of harnessing the cloud are significant.

There is an element of configuration within most software applications. When localising, firms may create ad-ons to enhance the software they use to perform that task. This could involve creating an instruction to CATALYST about how to identify the localisable sections within a file (known as creating a parser). It may be an instruction to CATALYST about how to detect specific error conditions that should not be allowed (a custom validation test).

A significant benefit of using CATALYST is the number of pre-existing file parsers and validation checks, however there is no limit to the number of ad-ons that users could make.

With the explosion in content consumption across the web and particularly with the growth in different mobile device formats, the need to allow flexibility when it comes to creating these ad-on pieces of technology is greater than ever.

Alchemy CATALSYT 10 answers this demand for flexibility by completely opening its internal engines. This innovation allow users share their knowledge and experience by accessing ad-ons in the cloud as well as those local to one's machine.

If a user creates an ad-on for parsing a file, or for detecting an error and decides to host that particular ad-on, then the industry as a whole benefits. Industry knowledge has grown. Likewise the team at Alchemy are constantly creating new and enhanced parsers that are instantly made available online.

This is how Alchemy Software Development are embracing the cloud. Alchemy CATALYST 10 increases the speed with which the industry can collectively progress.

INTRODUCTION

Software localization is the adaption of software applications for use in other cultures. A software application such as a mobile phone application may be developed in Sweden and have a Swedish language interface. To be consumed elsewhere, this application must be localised for the target market. This may involve translating the user interface into 10 or more languages. Large firms may localise into more than 100 languages.

The mission at Alchemy Software Development is to partner with software developers to accelerate their entry into international markets, to improve revenue growth opportunities and to reduce their costs.

Our products are used to

- Translate software user interfaces such as menus and dialogue screens
- Translate websites
- Translate user assistance material such as help systems

Integrated Localisation Environment

A fundamental concept at Alchemy Software is the facilitation of a single process to handle all types of content. Called the Integrated Localisation Environment, this gives users a unified approach to software L10n no matter what underlying file format they are dealing with.



The files to be localised may be varied, but the stake holders need only understand a single process to run a highly efficient workflow.

Coverage

There is a huge number of file formats built-in to Alchemy CATALYST. Offthe-shelf, it can be used to translate most software content. However with the number of consumer devices growing rapidly and the growing number of ways in which people consume content, the demand for localised content is growing too. For CATALYST, this means a rapidly increasing number of file formats to support.

Among other features, supporting new file formats means

- accurately identifying the text to translate
- instantly performing a mock translation suitable for a desired • language without incurring any actual translation costs
- securely validating edits on translated content

Cloud

Alchemy has a proven track record at being the best when it comes to the features and file formats supported.

To take that lead even further, Alchemy CATALYST 10 harnesses the limitless power of the cloud by allowing our wide user base to submit new file parsers, and verification tests and mock language definitions to our servers so that the multi-lingual community benefits.

If one user submits a file parser, then the rest of our 25,000 registered users can benefit.

Each time this happens, it multiplies greatly the benefit other users can gain from Alchemy CATALYST.



Integrated Localisation Environment

FUNCTIONALITY IN THE CLOUD

Localisation Features

For 90% of what is localised during a software project, Alchemy CATALYST will process the required files readily. However there are three times when some user configuration benefits the translation process significantly.

- For example, it might be that unusual or proprietary files needs special handling to identify the localisable sections (parsing).
- Some software development practices lend themselves well to subsequent translation. Others are less suitable and the translation effort will cost more. To test how suitable a software product is for translation, a project manager may wish to perform a mock or pseudotranslation. There are some built-in pseudo languages for performing such tasks, but the user can define their own if they so choose.
- Post-translation, it is important to verify that the changes made during translation have not detrimentally impacted the software product. To do this a process of validation is performed on the translated content. A large number of checks come with the product; however, users may need to periodically create their own specific checks.

These three areas of the product have been customisable for some time. The latest innovation hooks these facets of the software to the cloud so that parsers, pseudo languages and validation checks can reside either locally on the machine, or remotely in the cloud. If users opt to host their ad-ons in the cloud, this means that all users have access to them.

For example, it is likely that many localizers will require a test to validate that currency amounts such as "\$99.99" have been changed to some euro amount, e.g. " \in 66,66". Two aspects of the translation can be automatically validated.

- The dollar symbol has change to a euro symbol
- The decimal separator has changed from a dot to a comma

It is wasteful for everyone to create such a validation check. If one user creates it and hosts it then other users can use it as-is, allowing them to work faster.

Embracing the Cloud

The cloud has been integrated seamlessly so that users can avail of the benefits instantly. Like a menu of services, they can view availability and download if appropriate. This section shows the cloud interface for each of the three new customisable areas.

Parsing

File parsers are displayed in what is called the ezParse section of the product. The following screenshot shows how to interact with the cloud.

Cloud interface

		0	Edit Methods Dialog (*.pro	operties)			
	Import Parsing Rules	R	ule: WithIDs				▼
EZParse Import/Export Rules Online Parsers Submit Pa Define Rules File groups: Resource Files (executables) XMI Based Files Help Files Resource Soripts XIIIF Files Image Files Compressed Zip Files MS Help 2010	Source EZP Filename: Online repository ezParse Settings	TI 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<pre>tethods ranslatable Strings: D Start Tag</pre>	e By -Parameters .noprompts=No mat pleted=Show co	HII Sh HII ne par Defore	ow Tags DE ow Strings DE Ser with your downloading ID Original history History history.ti Title history.rr.Run By	

- The first click is a request to see Online Parsers
- The middle dialog results and displays any parsing technology that the user does not currently have.
- If one of these rules looks interesting, then clicking on Show Rule, results in a screen displaying the online rule. Users can try it out to see if acceptable before downloading locally.

Usability is an important design goal at Alchemy and the cloud integration makes no exception – viewing and downloading parsing rules is a simple task. Users can look online before creating their own rule. If they do go ahead and create their own rule – they also have the option of hosting it so no one else need do the same task.

Pseudo Languages

Pseudo translation is used to simulate the effects of translation on the project files. For example, it substitutes characters in the source files with diacritical or accented characters from a chosen language to ensure that the software being localised is able to process characters from that language. It performs other changes as well, such as making the text longer. Text length changes are designed to verify that the software will be able to handle increases in text length during translation.

While an actual translation has a financial cost, a pseudo translation can be done instantly at no cost. For this reason it is a very popular feature at the beginning of a localisation process.

A number of predefined pseudo-languages exist in Alchemy CATALYST, but the power of the cloud interaction is to allow users submit their own languages, or their own variations of existing languages.

Among many other use cases, this will be particularly beneficial for minority languages. Users of those languages can host their own pseudo languages instantly

Cloud interface

The Pseudo engine integrates seamlessly with the cloud allowing users to evaluate and download online pseudo-languages on the fly.

Name	Expand	Replace text	Pre-text	Post-text	Make unique	Characte 🔶	
Chinese	10		ZH_	_ZH	false	А-АЙ, В	
Chinese all characters	0		ZH_		false	a-β9], b≘	
Japanese Hiragana all characters	ev		JA_		false	a-あ, b-(J	
Japanese Kanji all characters	⁰ Pse	udo Language	S A_		false	a-苍, b-ê	
Japanese Katakana all characters		able in the clou			false	a-7, b-^,	
Japanese Mixed all characters	0	_	JA_		false	a-蒼, b-^	
Skorean all characters	5		ко_		false	a-숌, b-/	
🗅 Greek	10		EL_	_EL	false	A-AA, V-)	View
(III	10		B	_EL	false	a-α, v-β, ▼	Download
un u	10 Expand	Replace text	EL_ Pre-text	_EL Post-text	false Make unique	a-α, v-β, •	
Greek all characters Greek all characters		Replace text			1	•	Download
< III Ical Rules Name	Expand 10 Pseudo	Replace text	Pre-text	Post-text	Make unique	Character Set	Download

The cloud symbol indicates the languages that are available online. The computer symbol indicates what is available locally. The View button shows the content of a pseudo language and how it works. The download and submit buttons allow the user to transfer languages between local and online repositories.

Validation

Viewing the online validation tests, in this case, shows some very useful tests. The screenshot below indicates how the user has downloaded available tests such as

- Currency mapping
- Spanish Question Mark translation

Cloud Interface

Test Name	Original Term	Valid Translation	Description	
🔁 Spanish question mark ¿ missing	[^\?]+\?	ذ[^\?]+\?	In Spanish, questions are preceded b	
French punctuation preceded by a space character	[\?\;\;\!]	[\?\;\:\!]	Checks that all instances of colons, se	
\$, ¥ and £ to € Currency mapping	\\$ ¥ £	€	Checks that any instance of the \$, ¥	
\$, € and £ to ¥ Currency mapping	\\$ € £	¥	Checks that any instance of the \$, \in	
\$, ¥ and € to £ Currency mapping	\\$ ¥ €	£	Checks that any instance of the \$, ¥	
	€ ¥ £	\\$	Checks that any instance of the €, ¥	
Approved translated term for Prime Minister in Irish	Prime Minister	Taoiseach	Check a specific Term in Source is trai	
🔿 Decimal separator - Full stop to Comma	\.\d\d([^\d] \z)	,\d\d([^\d] \z)	Checks that a comma decimal separat	16-11
Decimal separator - Comma to Full stop	,\d\d([^\d] \z)	\.\d\d([^\d] \z)	Checks that a full stop decimal separa 🔻	<u>V</u> iew Download
Decimal separator - Comma to Full stop	, \d\d([^\d] \z) Original Term	\.\d\d([^\d] \z) Valid Translation	Checks that a full stop decimal separe	
Decimal separator - Comma to Full stop			•	Download
Decimal separator - Comma to Full stop Comma Separator - Comma to Full stop Comma Separator - Comma Separator Comma Separator	Original Term	Valid Translation	Description	Download
Decimal separator - Comma to Full stop Comma Separator - Comma to Full stop If the separator - Comma to Full stop Test Name System A for the Currency mapping Sysanish question mark & missing	Original Term	Valid Translation	Description Checks that any instance of the \$, ¥ or £ s	Download
Decimal separator - Comma to Full stop Comma Separator - Comma to Full stop If the separator - Comma to Full stop Test Name System A for the Currency mapping Sysanish question mark & missing	Original Term \\$ ¥ £ [^\y]+\?	Valid Translation € ¿[^\?]+\?	Description Checks that any instance of the \$, ¥ or £ s In Spanish, questions are preceded by ¿ an	Download
Decimal separator - Comma to Full stop Comma Separator - Comma to Full stop If the separator - Comma to Full stop Test Name System A for the Currency mapping Sysanish question mark & missing	Original Term \\$ ¥ £ [^\y]+\?	Valid Translation € ¿[^\?]+\?	Description Checks that any instance of the \$, ¥ or £ s In Spanish, questions are preceded by ¿ an	Download
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Decimal separator - Comma to Full stop	Original Term \\$ ¥ £ [^\y]+\?	Valid Translation € ¿[^\?]+\?	Description Checks that any instance of the \$, ¥ or £ s In Spanish, questions are preceded by ¿ an	Download

The cloud symbol indicates the validation the tests that are available online. The computer symbol indicates what is available locally. The View button shows the content of a validation test and how it works. The download and submit buttons allow the user to transfer languages between local and online repositories.

Benefit

The benefit again for the user is that they can move on with more pressing matters taking the online validation tests into their process and building from there.

CONCLUSION

Opt-In

There is no compulsion to work with this cloud technology. Alchemy CATALYST users need to be able to rely on a repeatable process. They need to operate in a secure environment where external changes cannot affect their process.

This remains the case. Users can work locally and only dip into the cloud when appropriate. They can completely ignore the cloud if they wish. Alternatively, users can test the appropriateness of what is online without downloading anything.

If, on evaluation a piece of online technology is deemed useful, one downloads it and that ad-on exists from then on as if it was created locally. There remains no link with the online rule. No change to what is online can affect how the local ad-on works. This means the localisable process remains closed, secure and repeatable.

Finally, if a user sees benefit in publishing some of their own rules, then a simple submit button makes that happen.

Moderation

To avoid risks that can be associated with online content, the Support Team at Alchemy provide the hosting. Before hosting, the support team moderate all submissions to ensure they do what is claimed and that they will benefit the industry.

Advancing the Industry

This is a significant innovation for Alchemy Software and for the software localization industry. The industry can move ahead faster than before as participants can start from a base that is continuously advancing. There is no need for people to re-invent the wheel. Using ready-made, online assets saves a user time and effort and allows that user to do something more constructive with their time, thus advancing faster than before.