



OcastaChat is a private micro-blogging platform that allows you to post 140 character messages to your account to be seen by other users on the system.

OcastaChat is built on the respected and scalable StatusNet micro-blogging platform with extensions to enable better use from mobile handsets and for deployment by mobile operators.

Deploying OcastaChat allows operators to provide own-label social networking while maintaining open standard support.

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What is OcastaChat?

OcastaChat is a private micro-blogging platform (similar to Twitter) that allows you to post 140 character messages to your account to be seen by other users on the system. Features include:

- Public Posting on a timeline
- Subscribe to other people's blogs and receive their posts
- Send Private Messages
- Create, join and post to groups
- See Group Posts and Timelines

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Who deploys OcastaChat?

OcastaChat is designed to be a private micro-blogging platform for customers of mobile networks. Network operators deploy OcastaChat (instead of relying on just the open blog platforms) for several reasons;

To offer an enhanced experience, using the networks own facilities for authentication and messaging access.

To encourage data and messaging usage. To keep users within their own service family while reducing churn by offering a richer experience. To increase their ability to see what interests their customers, to help direct marketing activities. To increase value for the operator by encouraging ownership of social media.

Core Features & Functionality The OcastaChat platform has been designed to support all the mandated functionality you would expect of a micro-blogging server but also to be extendable with new functionality and services.

Core Services

Standard function include:

- Create an account
- Post messages to your blog, including links to web sites and photographs
- Subscribe to receive other people's blog posts (and to unsubscribe)
- Reply to other people's posts
- Create or join groups or subscribe to existing groups
- Send direct person – person posts
- Search for people, groups or keywords across the service

Choice of Clients

The primary interface to OcastaChat is a WAP 2.0 (XHTML/MP) based web client designed for use from standard mobile phones. In order to increase usage and offer an improved user experience the following optional clients can be supplied:

- SMS interface, both to post blog entries and to receive messages (filtered)
- MMS interface, to allow the posting of images and videos as well as just text.
- Ajax based web interface, for access from a standard PC
- An enhanced web client for smartphones
- A Java MIDP application Mobile widgets
- An API for extending the platform reach from other development environments & clients

SMS / MMS Integration

One advantage in micro-blogging for a mobile operator is the ability to offer SMS message integration, which is almost impossible for a third party platform to offer, as there are so many different operator systems to potentially connect to.

A mobile operator can offer SMS messaging as either the primary input method or to support post alerts, whether as a paid for extension service or as a free offering to encourage usage. User costs can be easily controlled by deploying filtering rules and post summaries.

OcastaChat can be deployed with a messaging interface, directly to the operator infrastructure or via an approved third party messaging supplier.

User Authentication

An advantage of deploying a private micro-blogging network is the ability to control access and to automate authentication. Access can be restricted so personal accounts can only be created by the operator's own customers and authentication automated by passing the MSISDN or other unique identifier in the header when active in a session or when sending a message. It will also be possible to control access if necessary, so only users that have existing credit can they access the platform.

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The normal method of creating an account will be to use the operator supplied identifier, but to then apply extra information to the account to cover other usage scenarios.

- Create a nickname, that will be used as the visible name in posts.
- Create a password that can be used when automatic authentication is not possible, for example when using WiFi or from a fixed line PC.

Extending authentication with OpenID

OpenID is an industry supported scheme to allow authentication and access to services using an account held on a separate system. Further information can be found at <http://openid.net/>.

OpenID is the standard method of access control to OcastaChat and an OpenID gateway (to convert MSISDN based authentication to OpenID usage) is included in the deployed system. OpenID can be used in two ways:

- To allow the network's customers to use their Operator controlled OpenID to allow access to other third party services.
- To allow other people who are not customers to use the OcastaChat platform.

This flexibility is a key to the usage of OcastaChat between network operators, if required.

Search

A search interface is provided to the platform so that users can find people, groups and posts of interest. This may be to find interesting people to subscribe to, or to research posts on a particular topic irrespective of who posted it. Search is a key tool to increasing take up and usage of the platform.

Recommendations

An extension to user profiles is the ability for users of the platform to 'recommend' people to follow. This works in a similar way to eBay or Amazon profiling in allowing users to rank how good they find people's posts.

OcastaChat can be delivered with this functionality, so that stars from 1-5 can be given against other people which can then be searched for.

Spam & Content Control

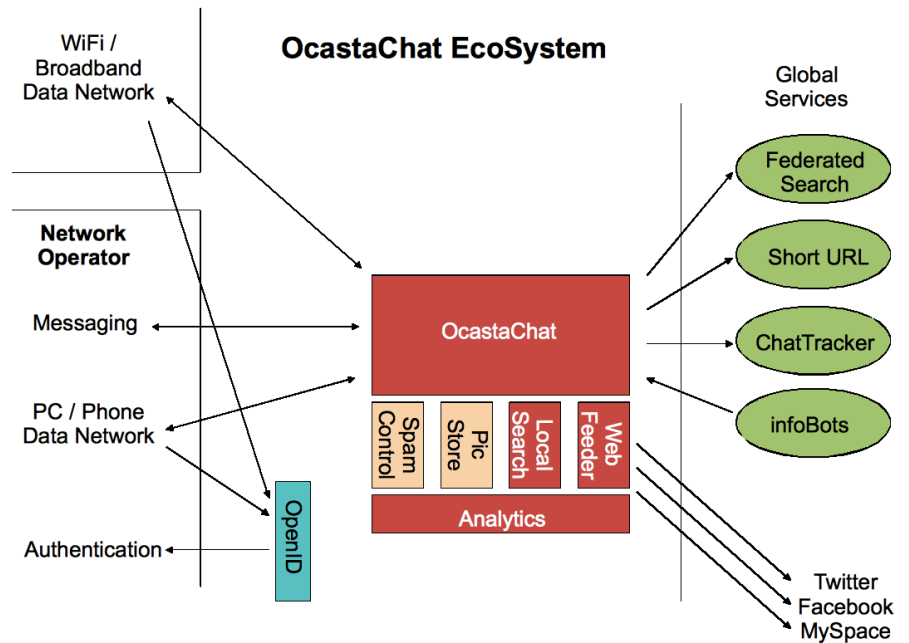
By controlling your own micro-blogging platform an operator can also provide a degree of content control. For example by limiting accounts to just the operator's own customers it will control companies trying to use the platform for advertising or 'spamming' people with messages. By controlling posts it is also possible to control what embedded links are posted. For example, you may wish to stop posts to known phishing sites.

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OCASTACHAT ECOSYSTEM As well as the core functionality – augmented for handset usage – it is possible to develop and deploy a whole ecosystem to support and extend the platform. Here are some of the potential and recommended extensions that should be considered.



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URL Shortener

A key use of micro-blogging is to enable the easy posting of web URLs of interest. These can however be long or complicated to type in, so frequently URL Shorteners are used. Such a service allows users to input a long URL and receive back a very short URL, which can then be inserted in a post. When the link is clicked on the ShortURL service receives the request then redirects the users to the correct (long) URL.

Picture Store

In a similar way to embedded web links you can also embed links to images, for which you need to either have an existing picture store (which can be linked to) or to supply one. OcastaChat can be supplied with a default picture store for use from the platform. This can receive pictures via web upload or from MMS messages and can be set to automatically post them to your blog if required.

ChatTracker

An additional service of interest to users is to see who on the service has been linking to particular web sites or pages of interest. A ChatTracker service allows an account to be set up where destination sites of interest can be logged, the user can then easily see when (and who) has also been showing an interest in the web site.

Analytics

Of use for the operator! Analytics on the system allows usage to be monitored for service planning but also as a guide to what people are writing about and linking to. This gives an operator useful information when planning services or when reviewing what is already offered.

InfoBots & Company Accounts

Blog entries do not have to just be restricted to personal use, it is also possible for companies or departments (such as Sales or Customer Support) to have their own accounts for informing users or providing feedback. It would be possible to automatically have new users be subscribed to the operators own feeds, so for example information on network outages or new offers could be sent to everyone on the system.

A particular type of account is called an 'InfoBot', which is an automated information feed with a blog interface. An example of usage could be a Weather channel; you simply send it a post asking for weather in a particular location and it will send a message back to you with the required information. You could even set up automatic feeds, so for example it will automatically send you a summary of today's weather in your home (or current) location each morning!

Social network feeds

OcastaChat can be set up (with account extensions) to automatically feed posts to the platform out to other systems where people may also have accounts. An example use would be to have posts to OcastaChat automatically sent on to Twitter and to Facebook, allowing three posts with one message.

Location

Another advantage of running your own social network is the ability to automatically add location information to posts and queries. OcastaChat can allow this lookup to occur at the beginning of a session and use the data in further posts.

OCASTACHAT SCALABILITY

OcastaChat is built on a standard three tier web architecture and is easily scalable to cope with the usage possible at a mobile operator. To extend beyond a single operator we recommend federation of the service.

FEDERATION

Federation is the ability to distribute functionality and services across a number of different companies and systems, in order to provide localised control with global scalability. While many well known web company services are not federated (Amazon, Google, eBay, Facebook, Twitter) the underlying technologies used in messaging and the web are.

Examples include:

- Email
 - Each entity holds their own messages stores and routers.
- World Wide Web
 - Web servers are managed by separate entities but can be cross-linked.
- GSM!
 - Global availability with individual companies controlling parts.

OcastaChat is designed to allow access between platforms for posting and following (if desired). Accounts on one system are known universally by the standard format of nickname@service.operator, which allows users to see and reach people on other systems round the world. To Subscribe to the Posts of another person you simply need to give the nickname if they are on the local system or the full name if they are hosted elsewhere

Such interoperability was a key to speedy SMS takeup and the lack of it slowed MMS development.

Design Impact

By supporting federation some services become more complex. These include Search which needs both local and federated search to be supported and user authentication. User authentication across systems is a key reason why OpenID is supported, if controls are in place it means you can allow local users to create accounts but visiting users to Subscribe to people or groups held on other systems and to send messages across platforms.

Benefits

Federation is a key differentiator in supporting micro-blogging to the network operator community. It allows differentiated services, branding and ownership while retaining and enabling global access to people and accounts.

Federation renders scalability issues obsolete, as separating the services stops a single function such as a gateway from being the bottleneck for the whole world. The numbers of users of mobile phones dwarfs the current users of social network sites, therefore this scalability is a key safeguard against growth problems.

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DEPLOYING OCASTACHAT

OcastaChat can be deployed as software for installation within the operator's own network or can be supplied by Ocasta Labs as Software as a Service (SaaS). Services can also be split between these two models, for example by deploying the core platform in-network for fast access and security, while accessing Ecosystem extensions as managed services.

FURTHER INFORMATION

For further information on deploying and using OcastaID please contact the company. See contact details at <http://www.ocastalabs.com>

ABOUT OCASTA LABS

Ocasta Labs is a mobile Internet web development firm founded in 2009 to research and develop new and innovative solutions to emerging opportunities. Services and products available include ChatCatcher for monitoring and linking social network comments to web pages, OcastaChat for social networking and OcastaID for mobile enhanced web service access.