# PostgreSQL @ clara.net

#### **Chris Fewtrell**

Messina Systems Development Manager

## Overview

- Claranet & Messina
- Messina What is it?
- PostgreSQL and its role

## Claranet

Founded in 1996, organically evolved from ISP to Managed Services Provider to meet demands of its customers today.

Today Claranet has operations in the UK, France, Germany, Portugal, Spain, The Netherlands and the USA. Claranet operate 24-hour network operating centres covering all countries and manage 12 offices and 16 datacentres.

More @ http://www.uk.clara.net/about/

# Messina @ Claranet

- Project started year 2000
- Provides the core Business Order Management services for most of the group
- Directly Related to Primary Revenue Stream
- Supports all core business processing
- Allows production of standardized KPI for continuous business improvement

# What does this mean?

- Messina is a Business Critical System
- Downtime is not an option
- How does PostgreSQL fit into all this?



#### What makes it tick

Consists of Five Logical Modules

- Interface User interaction and presentation
- Webservices Intersystem Communication and API provision
- Filestore Versioning File attachment facilities
- Backend Maintenance, Reports, Behind-the-scenes processing
- Database The "heart" & "brain", PostgreSQL

#### What makes PostgreSQL so important?

Operations performed solely within Postgres:

- All Business Service Invoicing
- Contract Renewal/Cancellation
- Sales Performance Tracking including profit margin analysis for KPIs

.. And more

#### What happens when it goes wrong?

Disaster Recovery Plans & Procedures are essential

- Log Shipping & Warm Standby
- Regular Database Dumps

EnterpriseDB Support Contract

#### Not just configurable

Single development team, supporting multiple sites with very different business logic and processes – as well as very different deployment and update strategies. Messina deployments can vary in version and age.

Configurable and adaptive application setup is essential to ensure backwards compliant code, and reduces support manpower.

#### Adaptive Data Logging

Very example

Single logging stored procedure (on INSERT, UPDATE, DELETE), analyzes table structure inside system catalogues (pg\_class, pg\_attribute, pg\_index and more). Decides on key, logs key value(s), old and new value for each field changed.

Replaces older version which used hardcoded fieldnames to determine what and how to log – VERY high maintenance

#### The Future

With a shift to Claranet providing Managed Services, the Business modelled by Messina needs to change. Larger International Solutions become the norm – promoting a large scale integrated Messina solution.

Replication using Slony-I – partial or full replication of data across the group to ensure full information sharing throughout company.

# PostgreSQL @ clara.net

End