SolveXia Business Continuity Planning

Business continuity planning is the term we use to describe all the steps we take at SolveXia to ensure that our service is up and running when you need it. As a 'software-as-a-service' provider, our aim is to provide a service that is reliable and available 24 hours a day, every day of the year. In this document we describe the measures we have taken to achieve this goal.

INFRASTRUCTURE

SolveXia's servers are housed at Microsoft's Azure data centre in Sydney. Through the use of the Microsoft datacentres, we have the benefits of all expected security, monitoring, access controls, redundancy, power, cooling and fire suppression infrastructure that these state-of-the-art centres provide.

DATA PROTECTION

The following sections discuss the measures in place to protect our clients' data.

No distributed data storage

The SolveXia platform applies a strict policy that no client or system data can be stored in any place other than the database. This means that the client side browser and the web application servers that provision the service to our clients never have data stored on them - even temporarily. This makes the data protection profile for the solution much easier to devise, manage and implement - and ensures that it is more resilient.

No interleaved data storage

The SolveXia platform applies a strict policy that client data can never be "interleaved" or "co-resident" in the same database. This is substantially different from the majority of SaaS offerings. Every client is assigned their own independent database which is secured and separately backed up. This makes data recovery more secure and faster as it isolates bodies of data in a way that facilitates accurate recovery on a per client basis.

Data storage protection

All client data stored in SolveXia's database is stored on RAID disk arrays.

SolveXia Business Continuity Planning

Data backup schedule

The points below summarise the data backup schedule used for client data within SolveXia. This backup schedule provides for daily data recovery points at the primary site.

- A full database backup is taken weekly
- A differential database backup is taken daily

In addition to this backup schedule, we also have the ability to perform more frequent backups for clients as required. This allows the client data stored within the SolveXia platform to match any existing data protection profiles and policies that clients have in place for other systems. Please speak to us directly if you have a need for a customised backup profile.

Location of data backup sets

Client databases in SolveXia are triple replicated in the Microsoft data centre in Sydney and geo-replicated at Microsoft's data centre in Melbourne. Microsoft Azure provides 24 x 7 engineering support to resolve any issues that may arise with the capture of backup data.

SolveXia Business Continuity Planning

APPLICATION PROTECTION

Over and above the series of actions to ensure data protection, a set of measures are in place to protect the application itself so that the service continues to be delivered even in the event of an interruption.

Measures	Notes
Multiple Web Application Servers	The SolveXia service is designed to operate with multiple web applications servicing client workloads at any point in time. This allows for the failure of one or more web application servers in the solution without rendering the overall service unavailable.
Dynamic Load Balancing between Web Application Servers	The SolveXia service is designed to use dynamic load balancing to route client requests to a web application server that has been verified as "alive and well" within the past 10 seconds. This provides resiliency in the event of a web application server failing - in that the infrastructure will automatically route client requests to an operational web server.
Clustered Database Servers	The SolveXia service is designed to operate with multiple database servers that operate in a clustered fashion. This means that when one database node fails (either because of a hardware or software problem), another physical node will "take over" the workloads of that server within approximately 2 minutes.

SolveXia Business Continuity Planning

PROCEDURAL VERIFICATION

An important part of providing a highly reliable service is to constantly test the procedures that are used to provide protection. The table below summarises the procedures that are tested regularly as part of our approach.

Process	Notes
Confirmation that backups have completed successfully	SolveXia is notified continuously with the status of the backup processes. These dashboards and reports include details that confirm each client database has been backed up.
Confirmation that the data backups are of valid format	Every month SolveXia operations staff use sample client backup data to run through a trial restore process. This verifies that the format of the backup is being maintained in a manner that lends itself to recovery.

SolveXia Business Continuity Planning

THE MICROSOFT AZURE DATA CENTRE

See http://www.microsoft.com/en-au/server-cloud/cloud-os/global-datacenters.aspx#Fragment_Scenario1 for information on Microsoft's Data Centres

Reviews

Date	Amended / Reviewed by	Reviewed / Approved by	Reviewed / Approved by
24Mar16	Paul Cartwright	Mark Schneider	Jonathan Glass
21Sep16	Paul Cartwright	Mark Schneider	Jonathan Glass
19May17	Paul Cartwright	Mark Schneider	Jonathan Glass
28Nov17	Paul Cartwright	Mark Schneider	Jonathan Glass