

# Managed Services

## Systems Management

**ac3** provides proactive management of Unix, Linux, or Microsoft environments for a predictable monthly fee, in both physical and virtual environments.

### Incident Management

**ac3** can monitor measurable operating systems parameters on a 24x7x365 basis. We can also monitor applications.

An incident is generated if we detect a parameter outside a defined range — or a Client may independently observe an incident and inform our Service Desk by email or telephone.

We will respond to incidents depending on their severity. Where there is doubt, we will reach agreement with Clients whether the incident is severity 1, 2 or 3. Our response will be in accordance with the Service Level Agreement.

### Change Management

A Change is similar to an Incident, except it is planned. Our Systems engineers will work with Clients to implement and coordinate planned changes to operating systems.

A change request may give rise to a project which is handled outside Managed Services as a Professional Service.

### Routine Management

Systems staff will routinely carry out the following:

- monitoring system logs
- monitoring and managing Backups
- carrying out ongoing performance tuning

### Operating System Maintenance

We will monitor communication from vendors and apply critical O/S Patches and Fixes. We will schedule routine updates in cooperation with clients.

### Reporting

We can provide routine reports on

- Overall Environment Status
- Systems Availability
- CPU and Memory Utilization
- Disk Utilization

### Supported platforms

- Unix: Solaris, HP-UX, AIX
- Linux: Redhat, Centos
- Windows: 2003 EE and SE, 2008 EE and SE

## Database Administration

**ac3** provides Database Administration (DBA) services for **Oracle** and Microsoft **SQL** databases.

**Break/Fix** — initiated by a Service Desk Incident request:

- recovering a database following hardware errors;
- handling table space issues and providing access rights;
- refreshing database instances;
- attending to database error reports;
- escalating issues to Oracle or Microsoft vendor support.



**Maintenance** — proactive maintenance to ensure databases meet customer expectations:

- monitoring databases against a routine checklist to identify the symptoms of potential issues at an early stage;
- setting up automated monitoring of databases;
- identifying performance bottleneck areas;
- recommending naming convention standards, document and report templates;
- installation and configuration of software including Real RAC, Data Guard, (RMAN), Partitioning;
- cloning and refreshing of databases;
- making recommendations based on performance reports — resizing, archiving, etc;
- reviewing and recommending vendor patches.

**Ad-Hoc Activities** — on request from Clients:

- reviewing existing database releases to suggest any upgrade to newer versions;
- recommending consolidation of databases or servers;
- ensuring standardisation across platforms;
- moving databases across the platforms;
- evaluating a disaster recovery strategy.

*Managed Services (cont'd):*

## Network and Security Management

ac3 can provide proactive management of

- Firewalls,
- Network Routers and Switches
- Network Links

### Monitoring

We can monitor network links and equipment on a 24x7x365 basis. An event that is observed to be outside predefined limits will trigger an Incident.

We can monitor network and firewall traffic for suspicious activities, identify security breaches and take action to block further possible security breaches.

### Change Management

Our engineers will work with Clients to implement and coordinate any changes to the network environment. A change request may give rise to a project which is handled outside Managed Services as a Professional Service.

### Routine Management

Systems staff will routinely carry out the following:

- monitoring system logs
- monitoring and managing Backups
- carrying out ongoing performance tuning

### Network Maintenance

We will monitor communication from vendors and apply critical Patches and Fixes. We will schedule routine updates in cooperation with clients.

### Security Reports

We will perform security appraisals and post-incident reviews to attempt to discover the root cause of any incident and define the extent of any breach. We will advise on the steps to be taken to restore the system to a secure state and ensure similar breaches do not occur again.

We will liaise with external agencies, e.g. AUSCERT, AFP, etc, to provide information required for further investigation.

### Reporting

We can provide routine reports the following:

- overall environment status
- systems availability
- link utilization
- traffic statistics
- security vulnerabilities

## Professional Services

ac3 can leverage off our experience in Managed Services and Co-location to provide design services, as well as implementation, in the following areas:

- Systems Architecture
- Networks and Security
- Storage, especially SAN based systems
- Virtualisation
- Data centre relocation
- Project Management

Rates	
Managed Services (12 month+ term)	\$850 per day
Implementation Services	\$1,150 per day
Design Services	\$1,500 per day

(prices exclude GST)



January 2010