

# BLAIR BEST PRACTICES ON HIGH AVAILABILITY



Think about how much your business relies on technology – from sales and customer service to strategic planning, accounting and human resources activities – your IT infrastructure is essentially the backbone of your organization.

Your IT system must avoid loss of service by reducing or managing failures and minimizing planned downtime. It is expected to be highly available when life, health, and well-being - including economic well-being – are at stake.

With years of expertise in High Availability, at Blair we know that to achieve HA for your enterprise requires thorough planning and consistent monitoring.

A good starting point for High Availability planning involves the identification of services that must be available for business continuity.

Below are our 5 best practices for implementing an HA solution:

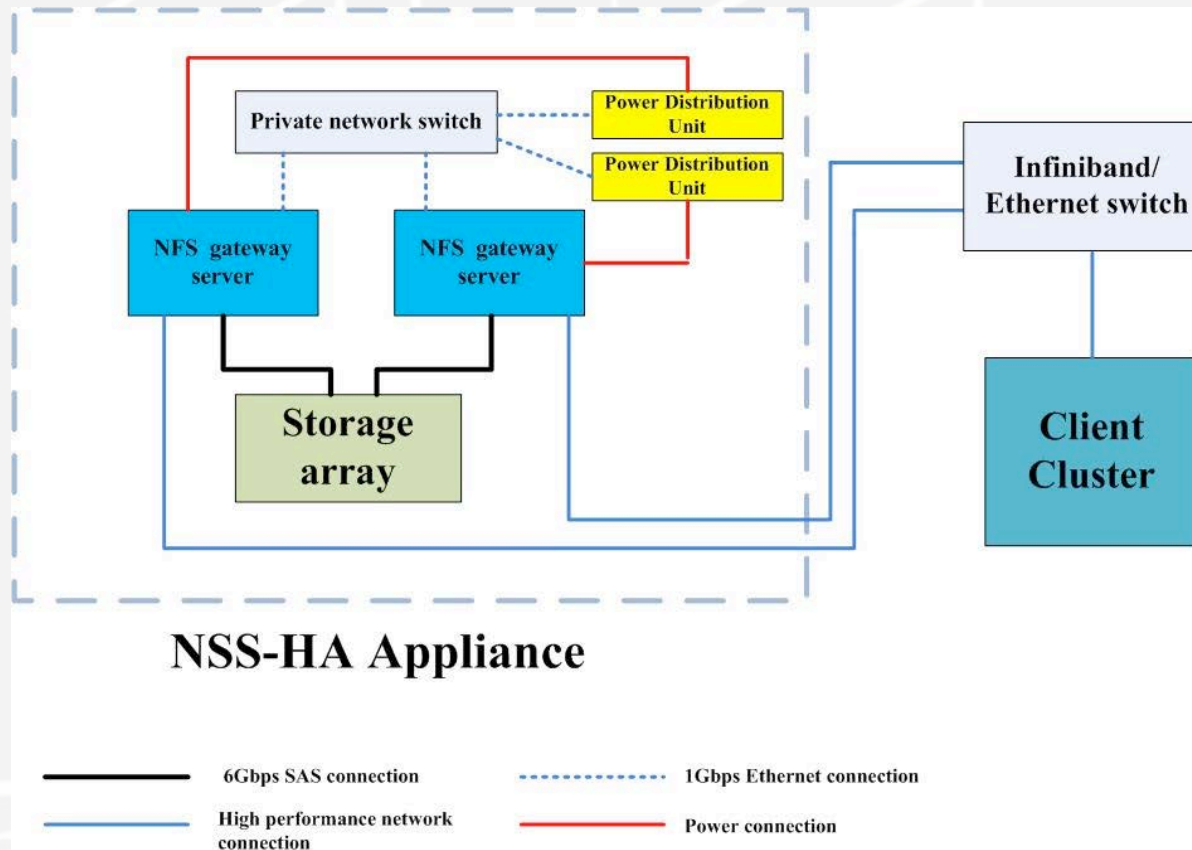
1. Scope and Analysis
2. Design
3. Planning and Implementation
4. Documentation Development and Delivery
5. Management and Maintenance

- **Scope:**  
Consider answering these questions:
  - What value does the technology bring to your business when it's working?
  - In the event of a technology failure, what happens to your business?
  - What revenue and productivity losses can the business tolerate, and for how long?
  - How far back do you need to recover data (RPO)? How quickly do you need to be restored (RTO)?
- **Analysis:**
  - What amount of bandwidth do you have/need?
  - What is the cost of bandwidth, environmental situation, hosting location, management model (internally or externally managed)

Recovery Point Objective (RPO) is the maximum acceptable level of data loss following a downtime event. RPO represents the point in time prior to such an event, to which lost data can be recovered – for example, the last minute, last five minutes, last 60 minutes.

Recovery Time Objective (RTO) is the period of time within which your business and/or technology capabilities must be restored following a downtime event. For example, 24 hours, 48 hours, etc.

Design both hardware and software architecture.



- An effective High Availability solution comprises 80% planning and 20% implementation.
- Detailed planning is crucial in order to realize business objectives and achieve user satisfaction.
- The High Availability solution must be validated by your business to be deemed effective. Three tests are performed:

SWITCH TEST #1: ERROR CORRECTION	SWITCH TEST #2: IT VALIDATION	SWITCH TEST #3: USER VALIDATION
Production system to backup system conducted by IT	Production system to backup system conducted by IT	Production system to backup system conducted by business users (such as Accounting, Human Resources)



Development of a recovery framework document to provide verifiable information for compliance and audit purposes that contain essential details, such as:

- Data that has been replicated
- Procedures and processes
- Technical specifications
- Detailed documentation of the High Availability solution
- Contact information and protocols in the event of an outage

Once your High Availability solution is deployed, it's important to ensure your business remains protected and available. Determine your enterprise's staffing, expertise and budget requirements, then consider the options.

### **Managed Services Model:**

- Leverages a remotely managed, cost-effective hosting service and ability to forecast for resources usage
- Offers reliable performance and predictable expenses that help increase IT ROI and improve efficiency
- Provides demonstrated expertise and experience, allowing your IT staff to focus on other priorities

### **Support Plan Model:**

- Provides a monthly subscription-based support plan that tailors to your organization's specific requirements and budgetary goals
- Merges various support options in a logical, functional and economical fashion
- Complements your existing resources, allowing you to reduce IT bottom line expenditures and corporate IT headcount



The best High Availability (HA) solution for your enterprise is dependent on a number of factors including business type, size, industry and IT drivers, in house technical capabilities, and budget.

Lack of a resilient HA plan is risky business.

At Blair we work with hundreds of enterprises across Canada to help them develop and implement a HA plan ensuring that the systems critical to their organization will continue to provide optimal service.

We create customized HA solutions to lower your IT risk.