

## **ASP.NET Best Practices Review**

Ensure your ASP
.NET Application is running optimally and performing well.

The ASP.NET Best Practices Review is designed and developed by Premier Field Engineering to evaluate and remediate production ASP.NET Applications and help ensure productive use.

This review includes analysis of an ASP.NET application for problems relating to configuration, performance, and other common issues. During the review hands on knowledge transfer of the essential production environment troubleshoot techniques to empower the application support staff. Finally a report that details findings and recommendations will be provided to complete the engagement.

- Improved stability in production
- Benchmarking and identification of performance bottlenecks
- Increased knowledge amongst developer team

# How the Offering Works:

This will cover the basic elements that are related to ASP.NET which includes:

- Scrutiny of Memory Profile of the application
- Analysis of common Performance Counters for ASP.NET, IIS and .NET
- Review of event logging
- Examination of the IIS logs for the ASP.NET application
- Assistance analyzing stress runs of the application in a test environment
- Breakdown of the exceptions commonly thrown by the application

In addition to the review, knowledge transfer around best practices for developing and improving your applications is provided.

# Stability:

By reviewing the application for common problems and best practice violations the review will identify areas of potential instability and provide recommendations to remediate those problems.

- Memory
- Diagnose memory pressure causes
- Review application for memory growth
- 2. Errors and Exceptions
- Identify common error causes.

## Benchmarking:

A key to understanding how to improve the performance of an application is to identify the bottlenecks in the application. This benchmarking will be key in driving performance improvements in the correct places across the application. Also, retrieving data from both production and test environments can be used to measure how well tests and the test environment reflect your production environment

## Knowledge Transfer:

During the review there is a heavy focus on providing the development and operations team with what to look for in a healthy application and how to find the source of potential problems.

In addition the engineer will discuss common best practices and how to implement them across the application. This knowledge transfer will ideally be done with the full development team to ensure that everyone is improving their development skills.

## IT Requirement:

#### **Application**

Must be buildable and running

Basic unit testing should be complete to ensure a stable state

- A way to perform runtime analysis of the application Either:
  - A Test/QA server and Stress testing scripts
  - A Production server and permission to collect a memory dump

#### **Individual or Team**

ASP.NET knowledge

Programming experience

Detailed knowledge of the application including:

- Application Architecture
- Application Requirements

#### Access to:

- Running version of the application
- Application source code

#### For more information

About consulting and support offerings from Microsoft, contact your Microsoft Services representative or visit <a href="https://www.microsoft.com.au/services">www.microsoft.com.au/services</a>.