HomeRun



# Scope

The HomeRun Implementation and Training engagement provides your organization training and assistance to install, configure and fully utilize HomeRun in your business' environment. This engagement consists of three days of on-site assistance from a Centerfield Technology consultant covering:

- Classroom lecture and hands-on exercises designed to introduce the concepts surrounding the use of Centerfield Technology HomeRun for understanding and tuning query activity as well as installation of the product.
- Consulting assistance to implement and leverage as many of the Centerfield Technology HomeRun features as possible in your environment and assist configuring your IBM System i to take advantage of these features.

The amount of work completed during the engagement will vary depending upon client requirements.

# **Assumptions & Dependencies**

- Your company will provide the required facilities and equipment to conduct on-site installation and training using the Centerfield Technology products.
- Your company will provide the Centerfield Technology consultant access to the proper passwords and accounts on the IBM System i for the purpose of HomeRun implementation.
- Your company will allow a minimum of 1.5 hours of restricted state access to the IBM System i required for performing the initial software installation and configuration (if the product is not installed prior to the engagement).

# **On-Site HomeRun Training**

## Description

HomeRun is an easy-to-use, task-based tool for helping you understand and tune query activity on your IBM System i. As a result, I/S professionals are able help reduce project backlogs by allowing their end users the ability to get query results with the performance they need.

Developed by database specialists and professional instructors, this course provides comprehensive, technical training for HomeRun. HomeRun training emphasizes using the following features: Collection Manager, insure/INDEX, insure/ANALYSIS, Visual SQL Explain, insure/RESOURCES, insure/MONITOR, lock/DETECTOR and query/OPTIMIZER.

The course is presented in a lecture / workshop format, which provides several "hands-on" exercises, with step-by-step instructions to reinforce the learning points. The students are introduced to query implementation theory and basic HomeRun usage.

## Audience

This course has been developed for anyone with prior IBM System i DB2/400 - i5/OS administration experience.

HomeRun



The course content minimizes "behind the scenes" technology and presents information from an administrator's perspective.

#### Duration

Two-Three days

## Prerequisites

Experience with IBM System i DB2/400 - i5/OS and Microsoft Windows 95/98/2000/XP/NT administration is required.

# **Course Agenda**

## Introduction to HomeRun

An overview of HomeRun with background information on DB2/400 - i5/OS performance issues as they relate to query activity.

## **Basics of Performance Management**

We present an introduction to IBM System i performance methodology, common terms and planning a strategy for your tuning and optimization. Also covered, will be the steps to begin database/application tuning using the Centerfield Technology methodology.

The three day training and implementation is designed to provide detailed information that can be used to understand and tune your database and query activity. The training will allow your users to effectively use HomeRun to address important issues like security, performance and change management. Each topic has varying levels of depth and consists of both classroom and hands-on activities. The training is offered in a form that is customizable for your environment.

# **Classroom Requirements**

## Classroom discussions will require:

- A data projection device
- A connection to an IBM System i that has HomeRun installed and operational. At a minimum, this will include the availability of an IBM System i connected to a Windows 95/98/2000/XP/NT using TCP/IP.
- PC for each attendee
- All applicable software installed on each PC
- User IDs/passwords set up for IBM System i connection
- software installed and configured on a test IBM System i machine used for class
- Test applications that can generate performance data for use as examples in the class

HomeRun



# **Hands-on Requirements**

The hands-on activities will require an IBM System i that can be used for education/testing and a personal computer for each student. Many of the training exercises may have an impact on IBM System i production workloads. It is not recommended to perform the training on an IBM System i that is being used for mission critical production work. If system or HomeRun configuration implementation changes are planned or required on any IBM System i as part of the training or implementation, the IBM System i must be 100% dedicated while these changes are being made.

The personal computers that are used for training should be configured to allow access to the IBM System i via a 5250-emulation package, HomeRun and a personal computer based query product. Optionally, the DB2 Query Mgr and SQL Dev. Kit for OS/400 licensed program product are also helpful.

# **Sessions Overview**

The session is tailored to meet the needs of the students given their previous training and experience. The engagement will involve some content from all sessions with emphasis on the sessions that AIG feels are most important to them to include but not limited to:

# **Product and Environment Introduction**

- Provide an introduction to Centerfield Technology and HomeRun
- Provide an introduction to database performance management and terminology

# Collecting SQL and query activity data using HomeRun

- Discuss data collection techniques and strategies for different types of environments
- Discuss how to leverage Collection Manager features for collecting data
- Understand how to use the Collection Manager feature to start, stop, and schedule data Collections
- Understand collection history and status
- Understand how to manage the data collection growth and size

## Understanding indices and indexing strategy

- Discuss different type of indices and how to create them
- Discuss the theory of when an index should or should not be used
- Introduce the factors that influence index usage

## Using insure/INDEX for recommending and creating indices

- Understand how to use Index Manager to recommend indices
- Understand Index Manager index recommendations
- Understand how to create indices using the Index Manager
- Understand index creation history and change management abilities of insure/INDEX

HomeRun



# Analyzing SQL and query activity

- Discuss the general analysis approach
- Discuss the measurements used to quantify and qualify activity
- Discuss benefits and disadvantages of different data access methods used by the Query Optimizer

# Using insure/ANALYSIS to understand SQL and query activity

- Understand filtering of data collections and drill-down analysis
- Understand the different categories of analysis and how to use the insure/ANALYSIS interface
- Understand available analysis items and when to use which items
- Understand how to identify jobs with potential tuning opportunity
- Understand how to identify statements with potential tuning opportunity
- Understand how to identify optimal and non-optimal index usage

# Using insure/ANALYSIS and SQL Visual Explain to tune SQL and query activity

- Understanding the controls that influence the Query Optimizer
- Understanding how to interpret the Visual SQL Explain constructs within the picture
- Understanding the benefits and disadvantages of different plan constructs
- Importing SQL Statements from various sources
- Techniques for changing the Query Optimizer's query or statement implementation

## Understanding configuration and internals

- Discuss HomeRun uses of built-in system functions and features
- Understand the HomeRun work management configuration
- Control access of HomeRun client features
- Modify system configuration options (dedicated IBM System i required)
- Modify HomeRun configuration (dedicated IBM System i required)

## **Product Requirements**

• Discuss and prioritize product suggestions specific to the customer's environment