#### Sessions related to new Query Framework on PDC 2005

### TLN306 The .NET Language Integrated Query Framework: An Overview

**Day/Time:** Wednesday, September 14 1:45 PM- 3:00 PM **Room:** Halls C & D (Petree Hall)

Speaker(s): Anders Hejlsberg Session Type(s): Breakout Session Level(s): 300

Track(s): Tools & Languages

Modern applications operate on data in several different forms: Relational tables, XML documents, and in-memory objects. Each of these domains can have profound differences in semantics, data types, and capabilities, and much of the complexity in today's applications is the result of these mismatches. The future "Orcas" release of Visual Studio aims to unify the programming models through integrated query capabilities in C# and Visual Basic, a strongly typed data access framework, and an innovative API for manipulating and querying XML. This session introduces each of these areas and walks through how they are related.

## TLN307 C#: Future Directions in Language Innovation from Anders Hejlsberg

**Day/Time:** Wednesday, September 14 3:15 PM- 4:30 PM **Room:** Halls C & D (Petree Hall)

**Day/Time:** Thursday, September 15 2:15 PM- 3:30 PM **Room:** 402 AB

Speaker(s): Anders Hejlsberg Session Type(s): Breakout Session Level(s): 300

Track(s): Tools & Languages

Join Anders Hejlsberg, Distinguished Engineer and chief architect of the C# language, for an in-depth walkthrough of the new language features in C# 3.0. Understand how features like extension methods, lambda expressions, type inference, and anonymous types make it possible to create powerful APIs for expressing queries and interacting with objects, XML, and databases in a strongly typed, natural way. It is suggested that you attend "The .NET Language Integrated Query Framework: An Overview" before attending this session.

### TLN308 Visual Basic: Future Directions in Language Innovation

Day/Time: Thursday, September 15 10:00 AM- 11:15 AM Room: 411

Speaker(s): <u>Paul Vick</u> Session Type(s): Breakout Session Level(s): 300

Track(s): Tools & Languages

Visual Basic 9.0 will offer radical improvements in its ability to work with data in all its forms: as objects, as XML, as relational data. Join the language architects for a detailed discussion of features such as query comprehensions, object initializers and anonymous types that enable querying data in a more flexible, natural way than ever before. Also, get a glimpse into the future of dynamic programming in VB with coverage of new features intended to radically simplify working with dynamically typed data on the .NET platform.

# DAT200 Future Directions for Data-Driven Applications: Storage, Applications, API's

**Day/Time:** Wednesday, September 14 11:00 AM- 12:15 PM **Room:** 150/151 (Hall E)

Speaker(s): David Campbell

Session Type(s): Breakout Session Level(s): 200 Track(s): Data & Systems

This session describes our vision for data-storage and data-driven application development. We also drill into running code so you can see how it all hangs together. Whether you're a business analyst, DBA, or a hard core VS or SQL developer there is something in this talk for you. We are in the midst of a sea change around data-wireless access is almost ubiquitous; we have PDA and Smart Phones with gigabytes of storage; a terabyte of raw storage costs less than \$1,000; documents are getting richer structure and semantics allowing them to be used a both as a data, and presentation source. Despite all these riches, managing data, programming against data, and getting value from data is still too hard. Microsoft product developers across several divisions have been working towards a vision that: 1) will make it much, much easier to program against all forms of data; 2) will store, manage, and provide value from all forms of data on systems ranging from Smart Phone to the Data Center; and 3) will provide data mining, reporting, and analysis in a simple fashion against all forms of data.

## DAT323 Using the .NET Language Integrated Query Framework with Relational Data

Day/Time: Friday, September 16 8:30 AM- 9:45 AM Room: 408 AB

Speaker(s): <u>Luca Bolognese</u> Session Type(s): Breakout Session Level(s): 300 Track(s): Data & Systems

Database-centric applications have traditionally had to rely on two distinct programming languages: one for the database and one for the application. This session introduces future advances Microsoft is making for the "Orcas" release of Visual Studio in programming languages and frameworks to help integrate relational data and queries with C# and Visual Basic. These advances enable developers to express queries and updates in terms of their local programming language without sacrificing the server-side execution model of today's high-performance SQL-based approaches. Using these advances, database queries that previously were stored as opaque strings now benefit from static type checking, CLR metadata, design-time type inference, and of course IntelliSense. It is suggested that you attend "The .NET Language Integrated Query Framework: An Overview" before attending this session.

## DAT324 Using the .NET Language Integrated Query Framework with XML Data

**Day/Time:** Friday, September 16 10:30 AM- 11:45 AM **Room:** 408 AB

Speaker(s): Dave Remy Session Type(s): Breakout Session Level(s): 300 Track(s): Data & Systems

One of the key challenges to working with XML data has been the impedance mismatch between XML and programming languages. This session introduces future advances Microsoft is making for the "Orcas" release of Visual Studio in programming languages and frameworks to help integrate XML and queries with C# and Visual Basic. The advances include a framework for navigating, querying, and transforming XML that is both easier to use and more efficient than current XML programming techniques. This framework marries the capabilities of XPath, XQuery, and the DOM with the language integrated query framework planned for C# and Visual Basic. It is suggested that you attend "The .NET Language Integrated Query Framework: An Overview" before attending this session.