



**Annual, Progress & Final Reports
REPORTS**

Part 1 - Summary Details

Please use your TAB key to complete part 1 & 2.

COTTON CRC Project Number:

- Annual Report:** Due 29th May 2003
Progress Report: Due 22nd November 2003
Final Report: Due within 3 months of project completion

Project Title:

Project Commencement Date: **01/07/03** Project Completion Date: **31/06/04**

Research Program: 4. Education, Transfer of Technology

Part 2 – Contact Details

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Part 6 – Final Report Format

The points below are to be used as a guideline when completing your final report.

1. *Outline the background to the project.*

Scientific Exchange Mr Scott Johnston

Purpose of Exchange: Attend Visual Basic Developers Conference

This application was for Scott Johnston to attend the Access/ Visual Basic Developers Conference, Las Vegas, Nevada USA, 8-12 June 2003. Organiser of the conference was the DEVCON Advisor Magazine with significant support from Microsoft Corporation.

The goal of the conference is to serve as a forum for the exchange of knowledge on different facets of software development using the Microsoft Access/Visual Basic development environment. Specific topics that will be addressed are:

- *Integration of Studio.net (New software development platform)*
- *Exposure to new version of VB*
- *Development of web services using Visual Basic*
- *Exposure to best practice solutions in VB programming*
- *Provide technical training in VB programming*

Presently the majority of our software is developed using the FoxPro Environment, and continues to be an extremely appropriate development environment to maintain. The conference is a unique opportunity to get exposure to the top developers using the alternative more powerful Visual Basic language and significant insight into the direction of the development platform and new operating systems from Microsoft. This is especially important given the impending redevelopment of CottonLOGIC. Scott intended to meet specifically with representatives from Microsoft to discuss our upgrading issues. In addition to these points unfortunately in Australia there is no formal training for Visual Basic in these areas. Most Visual Basic training of our programmers in the Cotton Management Support Systems team comes from Books and Videos which is extremely time consuming.

There is a real need for the decision support team to be exposed to the new *dot.net* development platform. Attendance at this conference is a superb opportunity to expose the decision support team to new software development technology before it is released rather than having to deal with it after the fact. This has caused considerable difficulties in the past.

Scott as a programmer in the CRC, attendance at his conference provides him a unique and focused opportunity for him to further develop skills in Visual Basic. It will also serve to enhance his knowledge in these areas through shared experiences. He will also be exploring opportunities to enhance our decision support capabilities through improvements in the application of new software development techniques.

Given the importance and need to explore technologies to enable future development of decision support software, additional assistance was provided by CSIRO to enable both Scott and Darren Linsley to attend this conference. The achievements of both Scott and Darren are presented in this report.

2. List the project objectives and the extent to which these have been achieved.

Attending the conference provided us with an excellent opportunity to gain exposure to a range of Microsoft .NET technologies including:

- VB .Net/C#.Net development languages for creating Windows applications.
- The ASP.NET environment used to create web-based applications.
- ADO.NET data access technology. This is Microsoft's latest method of "universal data access" to relational and non-relational data.
- Microsoft SQL Server technology used on web servers or for large mission critical databases where security and reliability are paramount.
- XML – a new text-based standard that every major player in the software and database worlds has agreed to conform to.
- A host of topics on professional software developed using .NET.

We were able to identify a number of .NET resources that are available to developers:

- Books and magazines including the Access/VB/SQL Advisor Magazine & Journal
- Websites dedicated to support .NET developers

The information and discussions we had at the conference confirmed the confidence we have that the Microsoft .NET environment will be capable of enabling us to meet the current and future software development needs of the Cotton CRC Cotton Management Support Systems team.

The conference also outlined a range of issues that we are likely to encounter during our development in .NET and provided options for us to investigate to overcome them.

The conference provided the perfect location for networking with our peers. These networking sessions produced some open and honest discussion with other professional software developers covering a wide range of topics. Networking opportunities like this need to be relished as they can often be few and far between while based at Narrabri.

Direct application and benefits to our program

The knowledge gained by Darren and Scott has been invaluable to our efforts in planning and initiating the redevelopment of CottonLOGIC. We are now using Visual Basic and .NET technologies across all our decision support tools. Darren and Scott had also benefited from attending this conference as they have established useful links with other programmers developing similar software.