



# Blaise Testing

Margaret Tang  
Statistics Canada  
IBUC 2007



# Overview

- Background
- Current Situation
- Blaise Testing Complexity
- Blaise Build Testing Process
- Blaise 4.8 Testing Summary
- Future Plans



# Background – Statistics Canada

- First Blaise Survey Instrument in production in 1999 with Blaise 4.1
- More than 200 Blaise CATI/CAPI Survey Instruments running across the agricultural, business and social sectors
- Survey Collection Sites
  - Head Office : Ottawa
  - Six Regional Offices across Canada



# Current Situation

- Survey Instruments in various Blaise builds
- At least 6 Blaise builds ranging from Blaise 4.4 to Blaise 4.7 are in use
- Majority of Survey Instruments: Blaise 4.6
- Statistics Netherlands Releases (As of Sept 14)
  - Blaise 4.6 : 2 this year, 13 total
  - Blaise 4.7 : 3 this year, 13 total
  - Blaise 4.8 : First Production Release, 5 Betas



# Blaise Testing Complexity

- Many components : Data Entry Program, API, Manipula/Maniplus, CATI Specification, CATI Management, Hospital, Blaise Control Center ...
- Rich features of Blaise Survey Instrument: Rules, Edits/Checks, Multilingual Support, Layout, Menus, Selective Checking Mechanism
- Survey Testing : mostly focus on instrument content (Question Text, Edits, Paths, etc)
- Multiple Infrastructure Models due to different requirements from different survey sectors



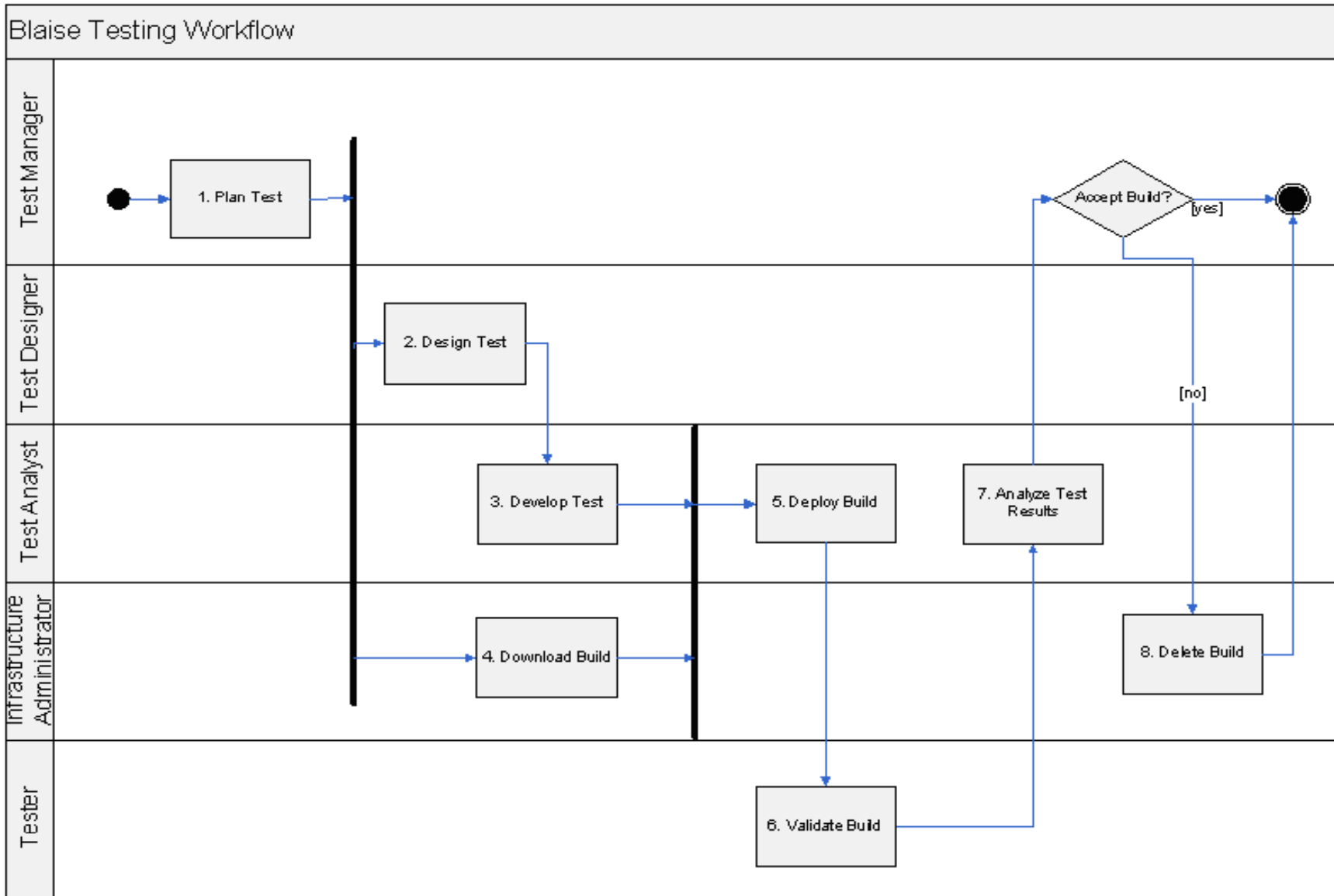
# Blaise Build Testing Goals

- Establish a standardized build testing process to evaluate a new Blaise version/build systematically
- Focus on the Blaise Platform instead of Survey Instruments
- Assess the impact and determine the changes required to adopt the new Blaise version/build against current production needs
- Investigate new features of a Blaise version and their applicability for STC surveys

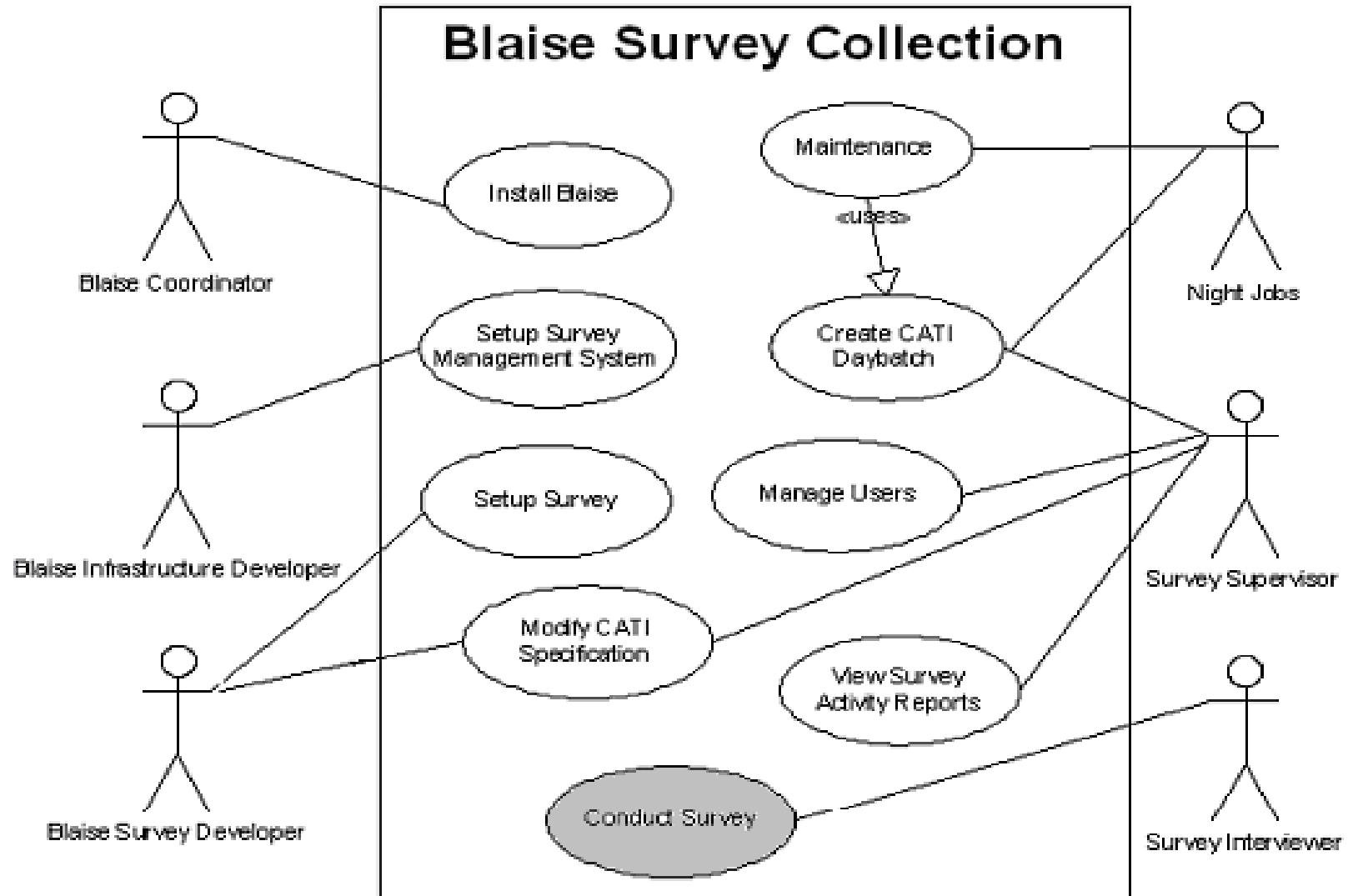


# Blaise Build Testing Process

<b><i>Roles</i></b>	<b><i>Activities</i></b>	<b><i>Artefacts</i></b>
Test Manager	Plan Test	Master Test Plan
Test Designer	Design Test	Test Cases, Test Bed
Test Analyst	Develop Test Deploy Build Analyze Test Results	Test Scripts/Procedures Test Evaluation Summary
Tester	Execute Test	Test Logs



# Blaise Build Testing Scope





# Blaise 4.8 Beta Testing

- Test Objective : Blaise Server Architecture in WAN
- Last Beta Build Used : 1159 (Released April 5, 2007)
- Ottawa : Blaise Databases, Blaise Executables
- Halifax : Two Blaise Interviewers
- Background Load : 10 Emulator Sessions
- Issues : 1) Slow WAN performance on existing Survey Infrastructure Architecture; 2) Inability to specify 4.8 surveys to run in local mode on Blaise 4.8 Service-Enabled Server
- Decision : Concentrate Blaise 4.8 testing in traditional architecture (File-System mode)
  
- Summary : 15 bugs reported across 5 betas



# Blaise 4.8 Production Build: 1190

- Test Objective : Backward Compatibility with 4.6
- Important Issues: (5 bugs reported)
  - Stricter Parser Check (e.g. InputFile1.Str(Fieldname))
  - Blaise 4.8 API Name Changes (Reference, Recompile)
  - Blaise Licence deployment required for CATI Programs
  - MS XML 4 installation required for CATI Management
  - New CATI Specification Format (.btr, more options)  
(Also means changes/issues in Blaise 4.8 CATI API)
  - Hospital Command Line Rebuild Problem (/R option)
  - Daybatch Sort (No effect on order of forms)
  - Blaise 4.8 Changes (Titles, Language Registry Key)
  - DEP : Tab/Spacing , Pane Background Colour

# CATI SRI (VB6, 4.7.1.1031 API)

**CATI Specification Regional Interface - CTUMS**

File Specify Help

Specification

- Survey Days
- Crew Parameters
- General Parameters**
- Users
  - Groups
  - Interviewers
- Time Zones
- Time Slices

**Daybatch Parameters**

Days between no answer calls (0-5) 5

Days between answering machine calls (0-5) 5

**Scheduler Parameters**

Maximum number of dials (2-6) 2

Maximum number of busy dials (1-4) 3

Do not allow multiple same day answering machine calls

**More Scheduler Parameters**

Minimum time between hard/super no-answer (5-15) 15

Minimum time between 'other' no-answer (5-360) 5

Minutes between busy dials (5-30):

10 15 20 25 30 30 30 30

OK

Cancel

Help

Français

# CATI SRI (VB 6, 4.8.0.1190 API)

File Specify Help

Specification

- Survey Days
- Crew Parameters
- General Parameters**
- Users
- Time Zones
- Time Slices

Daybatch Parameters

Days between no answer calls (0-5) 5

Days between answering machine calls (0-5) 5

Scheduler Parameters

Maximum number of dials (2-6) 6

Maximum number of busy dials (1-4) 4

Do not allow multiple same day answering machine calls

More Scheduler Parameters

Minimum time between hard/super no-answer (5-15) 5

Minimum time between 'other' no-answer (5-360) 5

Minutes between busy dials (5-30):

5 5 10 10 20 20 30 30

OK

Cancel

Help

Français

# DEP : Side by Side Testing (4.6)

Saisie de données Blaise - \\F70RDDBlaise4\_8\Blaise\Acceptance\_Testing\Social\CTUMS\_B46Test\CTUMS

Questionnaires Réponse Naviguer Options Aide

CTUMS | RVC |

RVC\_N01

No Échantillon : 01907 Groupe : INTER\_F

Province : Colombie-Britannique

Heure du répondant : 4:18PM

P1 : [Prénom : ANNE, Âge : 16, Sexe : Féminin]

P2 : [Prénom : CLAIRE, Âge : 20, Sexe : Féminin]

No Téléphone : (250) 478-0037

No Téléphone original : (250) 478-0037

Fuseau horaire : PDS

Langue : Français

Dernier code de résultat : 23 - Interview interrompue ou en suspens

Nombre d'appels : 3

Nombre de tentatives : 7

Rendez-vous :  
Date :  
Heure :  
Nom :  
Notes :

1. Procéder avec l'interview

2. Annuler

RVC\_N01

# DEP : Side by Side Testing (4.8)

Saisie de données Blaise - \\F70RDDBlaise4\_8\Blaise\Acceptance\_Testing\Social\CTUMS\_B48Test\CTUMS

Questionnaires Réponse Naviguer Options Aide

CTUMS | RVC | fAppointment

RVC\_N01

No Échantillon : 00810 Groupe : INTER\_F

Province : Québec

Heure du répondant : 6:53PM Rendez-vous : Rendez-vous incertain

Date : 2007/09/13

P1 : [Prénom : ANNE, Âge : 16, Sexe : Féminin] Heure : 1:00PM

Nom : N/A

Notes :

P2 : [Prénom : CLAIRE, Âge : 20, Sexe : Féminin]

No Téléphone : (819) 669-0034

No Téléphone original : (819) 669-0034

Fuseau horaire : EDS

Langue : Français

Dernier code de résultat : 24 - Rappel nécessaire; rendez-vous incertain

Nombre d'appels : 4

Nombre de tentatives : 7

1. Procéder avec l'interview

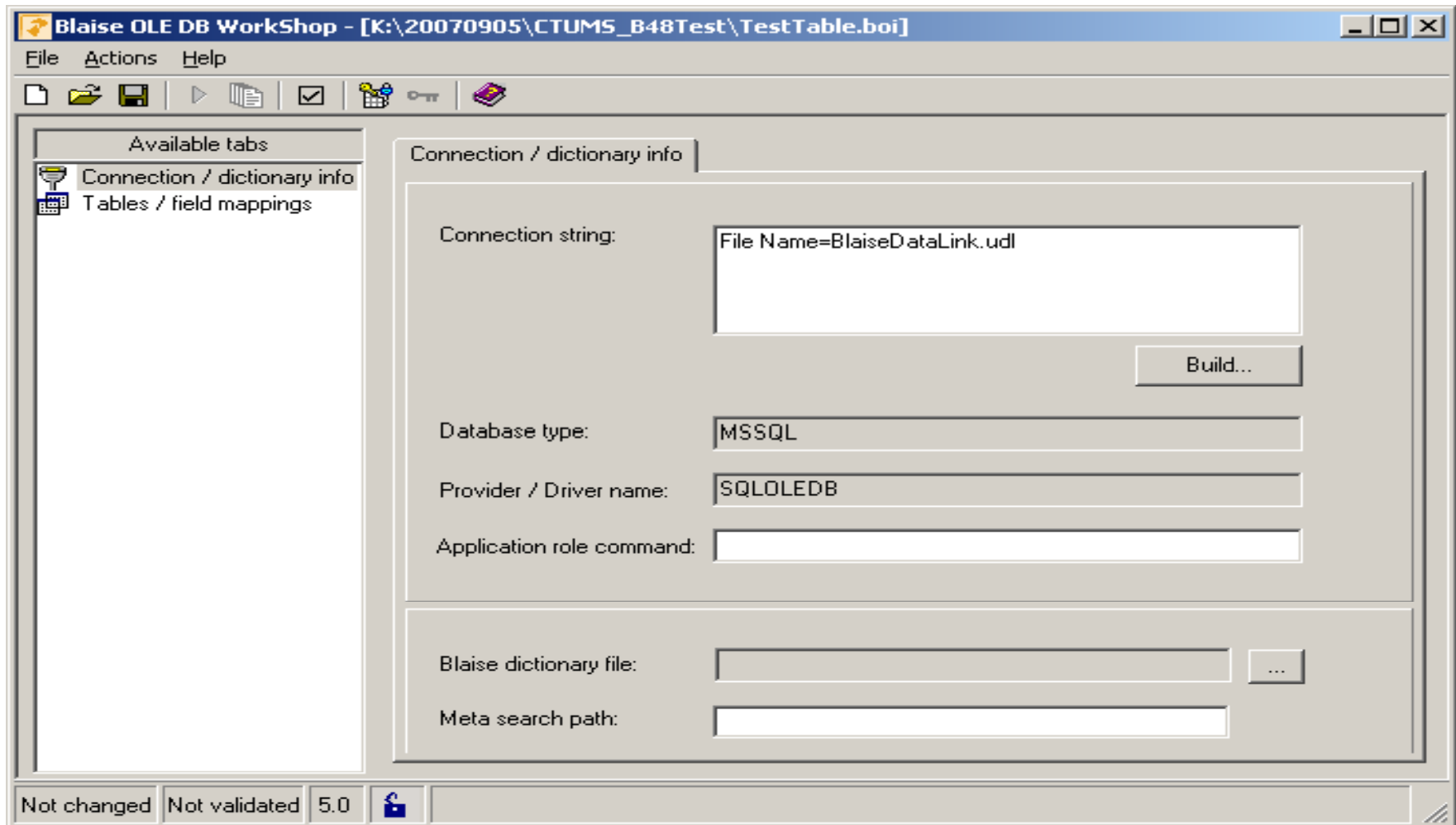
2. Annuler

RVC\_N01

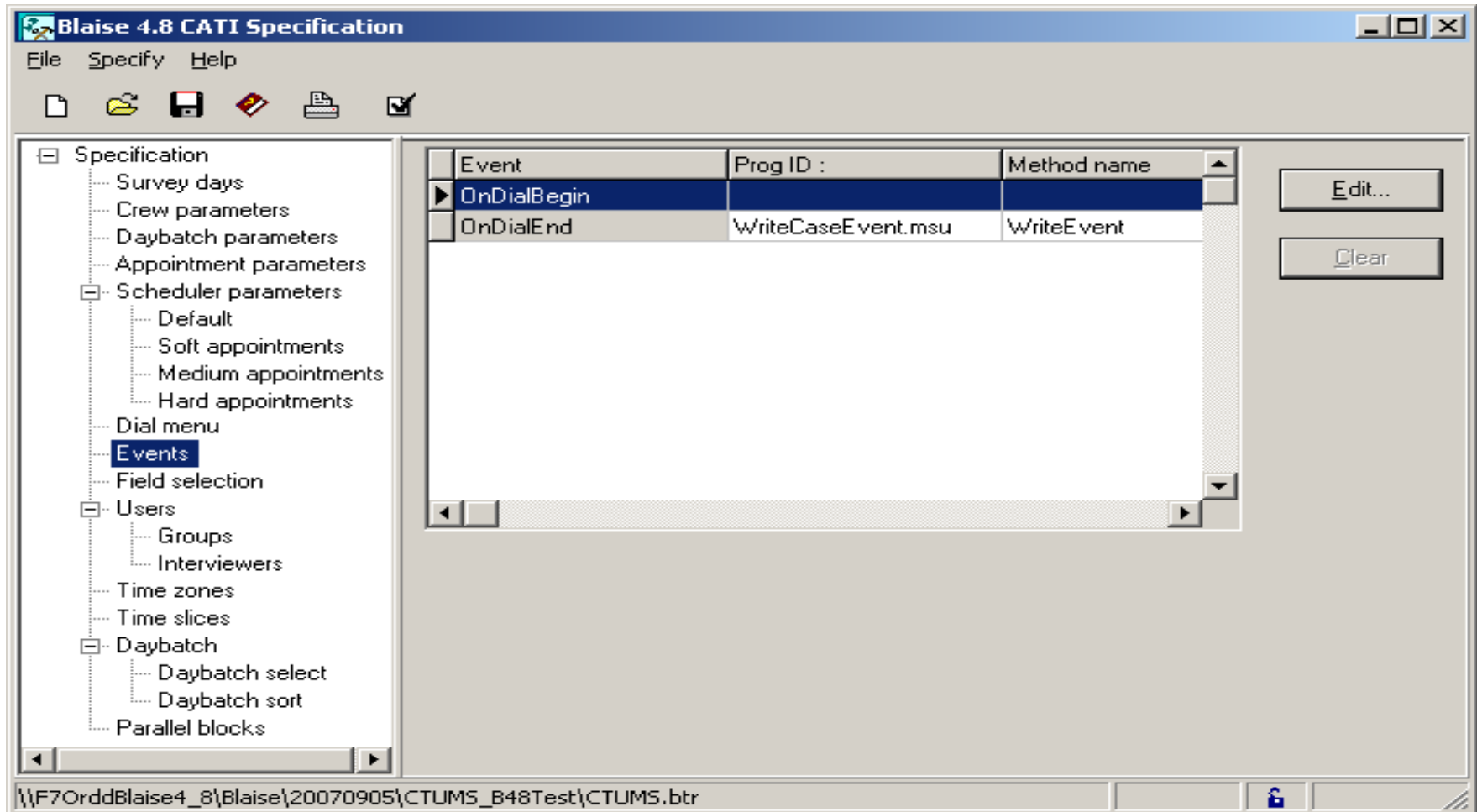


# New Features (Preliminary Tests)

- Blaise Datalink
  - e.g. Able to insert/update to SQL Server 2000
- Blaise CATI Event
  - e.g. Invoke Maniplus Script at OnDialEnd Event
- Maniplus Interchange
  - e.g. Able to call Alien Maniplus Procedures
  - e.g. Pass data between DEP and Maniplus
- Windows Registry (REGREADSTRING, REGWRITESTRING)
  - e.g. Able to retrieve Logon Name from Registry



- Update table : SQL statement, record set (simple key)
- Insert table : ADO recordset, single record (identity key)



- DEP passes data to Maniplus script through Interchange
- Maniplus script updates SQL Server through DataLink



# Future Plans

- Test the second production build with our testing process as soon as the build is available
- Start to automate parts of the Blaise Build Testing Process
- Continue evaluation of new Blaise 4.8 features
- Investigate different Survey Infrastructure Models for Blaise Server Architecture



# Contact Information

- Margaret Tang  
[margaret.tang@statcan.ca](mailto:margaret.tang@statcan.ca)
- Daniel Collison  
[daniel.collison@statcan.ca](mailto:daniel.collison@statcan.ca)

QUESTIONS and COMMENTS?