

# Legacy Michigan CATI Sample Management System – Mixed Mode CATI/Web

David Dybicki

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Washington, D. C.

# Overview

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- SMS
- Blaise IS
- Mixed Mode
- Lessons Learned
- Conclusion



# SMS

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- History
- Implementation
- Iwer Process
- Hooks to Web - Mooks
- Controls the flow of data between systems



# CATI Interviewer Process



Workstation

Login

Interviewer SMS System Login v8.0

Sample Management System Interviewer Login

Please login.

Username: zebulon

Password: \*\*\*\*\*

Login Exit

Project Selection

Projects for zebulon v8.0

Project ID	Main	Discus	ProjDr
...	...	...	...

Select Exit

Dial screen

SSL Sample Management System (4.8) v1.0

application for Production interviewing

Current Study: .....

Current Directory: .....

User: zebulon ID: ..... 7/17/2013 7:19 AM

Last Sample ID Call Record Entered: .....

Last Sample ID Accessed: .....

Get the next available case

Deliver Next Case

Select Case

Enter case by ID/Phone: .....

Change to another study

Select Study

Exit

Pre-interview

Coversheet

Back to Dial

Post-interview

Forms: Answer Navigate Options Help

Hello, my name is [INTERVIEWER NAME]. I am calling from the University of Michigan in Ann Arbor. First, I would like to make sure I dialed the right number. Is this [PHONE NUMBER]?

Am I speaking with [John Smith]?

1. Yes continue

5. No Say, "We are trying to reach [John Smith] regarding a research study that [John Smith] is participating in with the University of Michigan. Could you please tell me the best number at which to reach [John Smith] if number given, record number in telephone field on Balise screen (this will load into the field TrackPhone1 on coverscreen and into the TrackPhone1 field on the 3rd tab of the coverscreen). Thank informant and end the call. Record call note as appropriate and move to next case.

And what would be the best time to reach [John Smith]? Record all information given in the fields provided, and probe for time zone, if not stated—e.g. Day of Week ("M,T,W,Th,F,Sat,Sun"); Date ("after July 23rd; he's currently undergoing a medical procedure"); Time ("between 8pm and 8pm"); Time Zone ("would that be EST?"). Thank informant, and close the call. Record your observation, apply the proper result code as relevant to the information given/type of callback set (see Section 7.1, "Result Codes"), and record your complete call note including updated contact information. Then move to the next case.

\*IP NO. REDIAL

1. Yes

5. No

dialed right number

good time for interview

agree to record interview

Interview

Back to CS

Sample Management System

Forms: Answer Navigate Options Help

SMS [username@hostname]

New Tracking Info Available - 07/09/2013

\*: 734/111-1111 Non-Working numbers: 734/222-2222

! : 734/222-2222

@: 734/333-3333

R Track Phone1: 734/555-5555 03/11/2013

R Track Phone2: 734/555-5555 06/12/2013

Current status: Active duty Contact made: Yes

Current Date: 7/17/2013 Current Time: 7:49AM

R Curr. Time: 7:48AM R Timezone: Eastern

Updated Respondent data

Release

Respondent Name and Address

John Tyler

614 Memory Lane

Ann Arbor MI 48103

Call Record

Number of Calls: 1

Last Call Repeat: 4201

Last Call Date: 09/13/2013

Last Call Time: 11:05am

Last Call Note: Spoke with RL, RL requested appointment at 1800 on 06/14/2013 appointment set

1. Start Interview

2. Appointment/Callback

3. Refuse

4. No Contact/Non-Interview/Non-Sample

5. Tracking

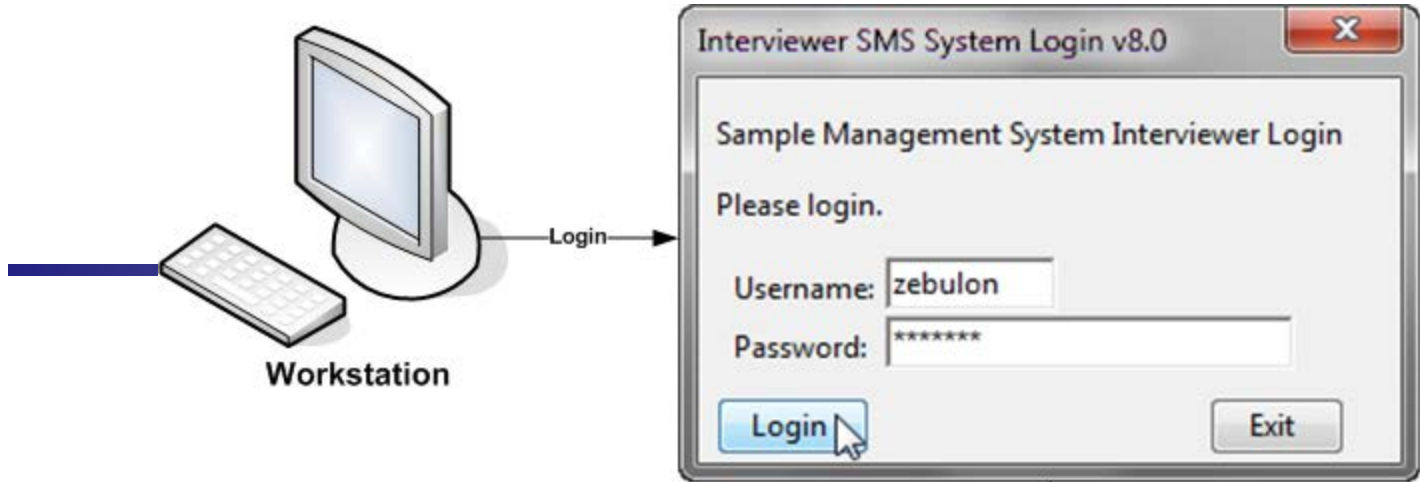
6. Hold for Supervisor

7. Study Specific

8. Exit

Coversheet1





Project Selection

Projects for zebulon v8.0

zebulon Peter Sparks Administrator

Project ID	Main	Groups	ProjDir
...Test			\\...
...PRODUCTION			\\...

Select Exit



# CATI Interviewer Process



Workstation

Login

Interviewer SMS System Login v8.0

Sample Management System Interviewer Login

Please login.

Username: zebulon

Password: \*\*\*\*\*

Login Exit

Project Selection

Projects for zebulon v8.0

Project ID	Main	Group	ProjDir
...	...	...	...

Select Exit

Dial screen

SSL Sample Management System (4.8) v1.0

application for Production interviewing

Current Study: .....

Current Directory: .....

User: zebulon ID: ..... 7/17/2013 7:19 AM

Last Sample ID Call Record Entered: .....

Last Sample ID Accessed: .....

Get the next available case

Enter case by ID/Phone

Deliver Next Case Select Case

Change to another study

Select Study Exit

Pre-coversheet

Coversheet

Back to Dial

Post-coversheet

Forms: Answer Navigate Options Help

Hello, my name is [INTERVIEWER NAME]. I am calling from the University of Michigan in Ann Arbor. First, I would like to make sure I dialed the right number. Is this [NUMBER]?

Am I speaking with [John Smith]?

1. Yes continue

5. No Say, "We are trying to reach [John Smith] regarding a research study that [John Smith] is participating in with the University of Michigan. Could you please tell me the best number at which to reach [John Smith] if number given, record number in telephone field on Balise screen (this will load into the field TrackPhone1 on coverscreen and into the TrackPhone1 field on the 3rd tab of the coverscreen). Thank informant and end the call. Record call note as appropriate and move to next case.

And what would be the best time to reach [John Smith]? Record all information given in the fields provided, and probe for time zone, if not stated—e.g. Day of Week ("M,T,W,Th,F,Sat,Sun"); Date ("after July 23rd; he's currently undergoing a medical procedure"); Time ("between 8pm and 9pm"); Time Zone ("would that be EST?"). Thank informant, and close the call. Record your observation, apply the proper result code as relevant to the information given/type of callback set (see Section 7.1, "Result Codes"), and record your complete call note including updated contact information. Then move to the next case.

\*# NO. REDIAL

1. Yes

5. No

dialed right number

good time for interview

agree to record interview

Pre-interview

Interview

Back to CS

Post-interview

Sample Management System

Forms: Answer Navigate Options Help

SMS [username@hostname]

New Tracking Info Available - 07/09/2013

\*: 734/111-1111 Non-Working numbers: 734/222-2222

1) \*\* 734/222-2222

2) 734/333-3333

R Track Phone1: 734/555-5555 03/11/2013

R Track Phone2: 734/555-5555 06/12/2013

Current status: Active duty Contact made: Yes

Release: .....

Respondent Name and Address: .....

Ann Arbor MI 48103

Call Record:

Number of Calls: 1

Last Call Repeat: 4201

Last Call Date: 09/13/2013

Last Call Time: 11:05am

Last Call Note: Spoke with RL, RL requested appointment at 1800 on 06/14/2013 appointment set

1. Start Interview

2. Appointment/Callback

3. Refuse

4. No Contact/Non-Interview/Non Sample

5. Tracking

6. Hold for Supervisor

7. Study Specific

8. Exit

Coversheet 1



Dial screen

SSL Sample Management System (4.8) v1.0

application for Production interviewing

Current Study: A STARRS BTCT20  
Current Directory: \\...\\Prod\\

User: zebulon ID: 75005022 7/17/2013 7:19 AM  
Last Sample ID Call Record Entered:  
Last Sample ID Accessed:

Get the next available case

Enter case by ID/Phone

Change to another study

Pre-coversheet

Coversheet

Back to Dial

Post-coversheet



# CATI Interviewer Process



Workstation

Login

Interviewer SMS System Login v8.0

Sample Management System Interviewer Login

Please login.

Username: zebulon

Password: \*\*\*\*\*

Login Exit

Project Selection

Projects for zebulon v8.0

Project ID	Main	Group	ProjDr
...	...	...	...
...	...	...	...

Select Exit

Dial screen

SSL Sample Management System (4.8) v1.0

application for Production interviewing

Current Study: .....

Current Directory: .....

User: zebulon ID: ..... 7/17/2013 7:19 AM

Last Sample ID Call Record Entered: .....

Last Sample ID Accessed: .....

Get the next available case

Enter case by ID/Phone:

Deliver Next Case Select Case

Change to another study

Select Study Exit

Pre-coversheet

Coversheet

Back to Dial

Post-coversheet

Forms: Answer Navigate Options Help

Hello, my name is [INTERVIEWER NAME]. I am calling from the University of Michigan in Ann Arbor. First, I would like to make sure I dialed the right number. Is this [PHONE NUMBER]?

Am I speaking with [John Smith]?

1. Yes continue

5. No Say, "We are trying to reach [John Smith] in regard to a research study that [John Smith] is participating in with the University of Michigan. Could you please tell me the best number at which to reach [John Smith] if number given, record number in telephone field on Balise screen (this will load into the field TrackPhone1 on coverscreen and into the TrackPhone1 field on the 3rd tab of the coverscreen). Thank informant and end the call. Record call note as appropriate and move to next case.

And what would be the best time to reach [John Smith]? Record all information given in the fields provided, and probe for time zone, if not stated—e.g. Day of Week ("M,T,W,Th,F,Sat,Sun"); Date ("after July 23rd; he's currently undergoing a medical procedure"); Time ("between 8pm and 9pm"); Time Zone ("would that be EST?"). Thank informant, and close the call. Record your observation, apply the proper result code as relevant to the information given/type of callback set (see Section 7.1, "Result Codes"), and record your complete call note including updated contact information. Then move to the next case.

\*# NO. REDIAL

1. Yes

5. No

dialed right number

good time for interview

agree to record interview

Pre-interview

Interview

Back to CS

Post-interview

Sample Management System

Forms: Answer Navigate Options Help

SMS (zebulon@umich.edu)

New Tracking Info Available - 07/09/2013

\*: 734/111-1111 Non-Working numbers: 734/222-2222

1: \*\*\* 734/222-2222

0: 734/333-3333

R Track Phone1: 734/955-5555 03/11/2013

R Track Phone2: 734/955-6960 06/12/2013

Current status: Active duty Contact made: Yes

Current Date: 7/17/2013

Current Time: 7:49AM

R Curr: Time: 7:48AM

R Timezone: Eastern

Updated Respondent data

Respondent Name and Address

John Taylor

614 Memory Lane

Ann Arbor MI 48103

Call Record

Number of Calls: 1

Last Call Repeat: 4201

Last Call Date: 09/13/2013

Last Call Time: 11:05am

Last Call Note: Spoke with RL, RL requested appointment at 1800 on 06/14/2013 appointment set

1. Start Interview

2. Appointment/Callback

3. Refuse

4. No Contact/Non-Interview/Non Sample

5. Tracking

6. Hold for Supervisor

7. Study Specific

8. Exit

Coversheet 1



Sample Management System

Forms Answer Navigate Options

SMS NonWorkingNumbers

**New Tracking Info Available - 07/05/2013**

\*?: 734/111-1111 Non-Working numbers: 734/222-2222  
 !1: \*\*\* 734/222-2222  
 !0: 734/333-3333

---

IN Track Phone1: 734/555-5555 03/11/2013  
 IN Track Phone2: 734/666-6666 06/12/2013

**Pre-Post Development Study - 1**

Current status: Active duty Contact made: **Yes**

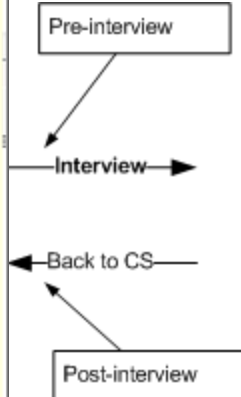
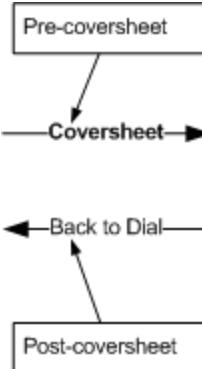
**TRUNK 12** Current Date: 7/17/2013  
 Installation: FDNC Current Time: 7:48AM  
 Release: R Curr. Time: 7:48AM  
 R Timezone: Eastern

Respondent Name and Address Updated Respondent data  
 Ryan Yoder  
 614 Memory Lane  
 Ann Arbor MI 48103

Call Record:  
 Number of Calls: 1  
 Last Call Result: 4201  
 Last Call Date: 06/13/2013  
 Last Call Time: 11:05am  
 Last Call Note: Spoke with R, R requested appointment at 1800 on 06/14/2013 appointment set

1. Start Interview  7. Study Specific  
 2. Appointment/Callback  8. Exit  
 3. Refusal  
 4. No Contact/Non-Interview/Non-Sample  
 5. Tracking  
 6. Hold for Supervisor

CoverSheet1



Sample Management System

Forms Answer Navigate Options

SMS NonWorkingNumbers

**New Tracking Info Available - 07/05/2013**

\*: 734/111-1111 Non-Working numbers: 734/222-2222  
 !: \*\*\* 734/222-2222  
 !0: 734/333-3333

---

IN Track Phone1: 734/555-5555 03/11/2013  
 IN Track Phone2: 734/666-6666 06/12/2013

**Pre-Post Development Study - 1**

Current status: Active duty Contact made: **Yes**

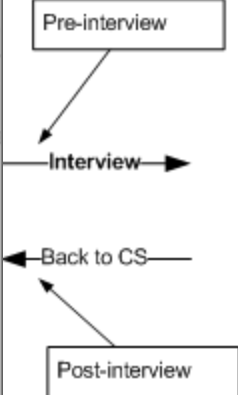
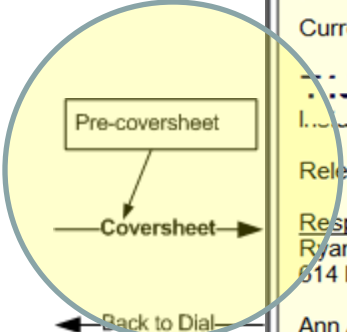
**7/17/2013** Current Date: 7/17/2013  
 Location: FDNC Current Time: 7:48AM  
 Release: R Curr. Time: 7:48AM  
 R Timezone: Eastern

Respondent Name and Address Updated Respondent data  
 Ryan Yoder  
 614 Memory Lane  
 Ann Arbor MI 48103

Call Record:  
 Number of Calls: 1  
 Last Call Result: 4201  
 Last Call Date: 06/13/2013  
 Last Call Time: 11:05am  
 Last Call Note: Spoke with R, R requested appointment at 1800 on 06/14/2013 appointment set

1. Start Interview  7. Study Specific  
 2. Appointment/Callback  8. Exit  
 3. Refusal  
 4. No Contact/Non-Interview/Non-Sample  
 5. Tracking  
 6. Hold for Supervisor

CoverSheet1



# PreCS.man

---

- Check to see if case completed on web
- Pass in data useful for Coverscreen display



Sample Management System

Forms Answer Navigate Options

SMS NonWorkingNumbers

**New Tracking Info Available - 07/05/2013**

**\*?: 734/111-1111** Non-Working numbers: 734/222-2222  
 !1: \*\*\* 734/222-2222  
 !0: 734/333-3333

---

IN Track Phone1: 734/555-5555 03/11/2013  
 IN Track Phone2: 734/666-6666 06/12/2013

**Pre-Post Development Study - 11**

Current status: Active duty Contact made: **Yes**

**TRUNK 12** Current Date: 7/17/2013  
 Installation: FDNC Current Time: 7:48AM  
 Release: R Curr. Time: 7:48AM  
 R Timezone: Eastern

Respondent Name and Address Updated Respondent data  
 Ryan Yoder  
 614 Memory Lane  
 Ann Arbor MI 48103

Call Record:  
 Number of Calls: 1  
 Last Call Result: 4201  
 Last Call Date: 06/13/2013  
 Last Call Time: 11:05am  
 Last Call Note: Spoke with R, R requested appointment at 1800 on 06/14/2013 appointment set

1. Start Interview  7. Study Specific  
 2. Appointment/Callback  8. Exit  
 3. Refusal  
 4. No Contact/Non-Interview/Non-Sample  
 5. Tracking  
 6. Hold for Supervisor

CoverSheet1

Pre-coversheet

Coversheet

Back to Dial

Post-coversheet

Pre-interview

Interview

Back to CS

Post-interview



# PostCS.man

---

- Write essential data to SQL tables:
  - A status that requires some type of action
  - Result code status
  - Respondent Name and address updates
  - Contact person Name and address updates



Sample Management System

Forms Answer Navigate Options

SMS NonWorkingNumbers

**New Tracking Info Available - 07/05/2013**

\*?: 734/111-1111 Non-Working numbers: 734/222-2222  
 !1: \*\*\* 734/222-2222  
 !0: 734/333-3333

---

IN Track Phone1: 734/555-5555 03/11/2013  
 IN Track Phone2: 734/666-6666 06/12/2013

**Pre-Post Development Study - 11**

Current status: Active duty Contact made: **Yes**

**TRUNK 12** Current Date: 7/17/2013  
 Installation: FDNC Current Time: 7:48AM  
 Release: R Curr. Time: 7:48AM  
 R Timezone: Eastern

Respondent Name and Address Updated Respondent data  
 Ryan Yoder  
 614 Memory Lane  
 Ann Arbor MI 48103

Call Record:  
 Number of Calls: 1  
 Last Call Result: 4201  
 Last Call Date: 06/13/2013  
 Last Call Time: 11:05am  
 Last Call Note: Spoke with R, R requested appointment at 1800 on 06/14/2013 appointment set

1. Start Interview  7. Study Specific  
 2. Appointment/Callback  8. Exit  
 3. Refusal  
 4. No Contact/Non-Interview/Non-Sample  
 5. Tracking  
 6. Hold for Supervisor

CoverSheet1

Pre-coversheet

Coversheet

Back to Dial

Post-coversheet

Pre-interview

Interview

Back to CS

Post-interview



# PostIW.man

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- Review completion status of interview
- Calculate time of interview
- Write to Coverscreen pertinent data collected in instrument
- Write data from instrument that can be used by a reporting system



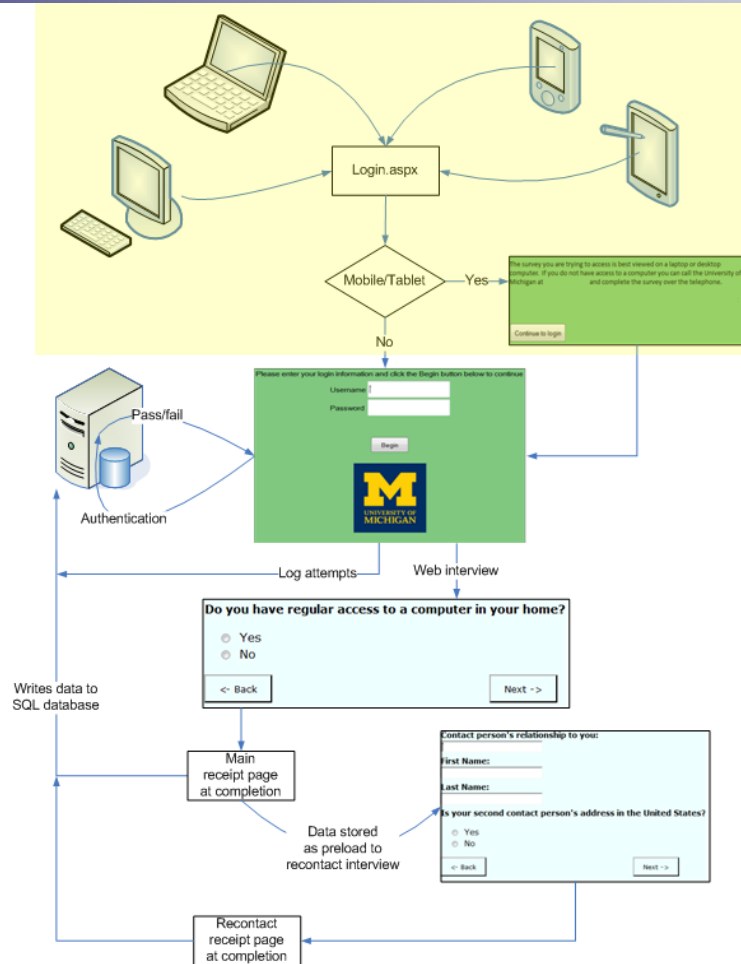
# Blaise IS

---

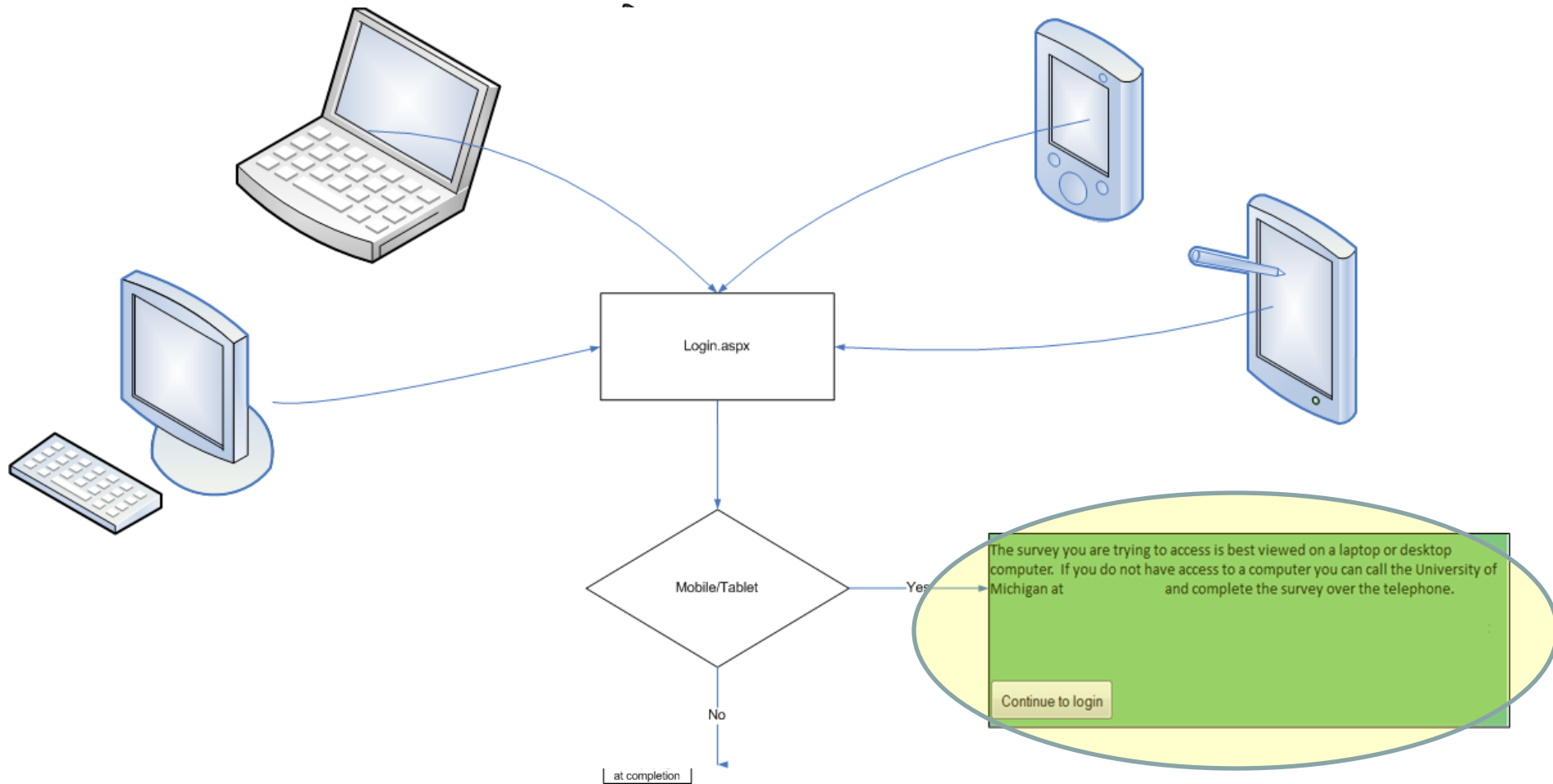
- Web respondent process
- Servers and databases
- Mixed mode



# Web Respondent Process

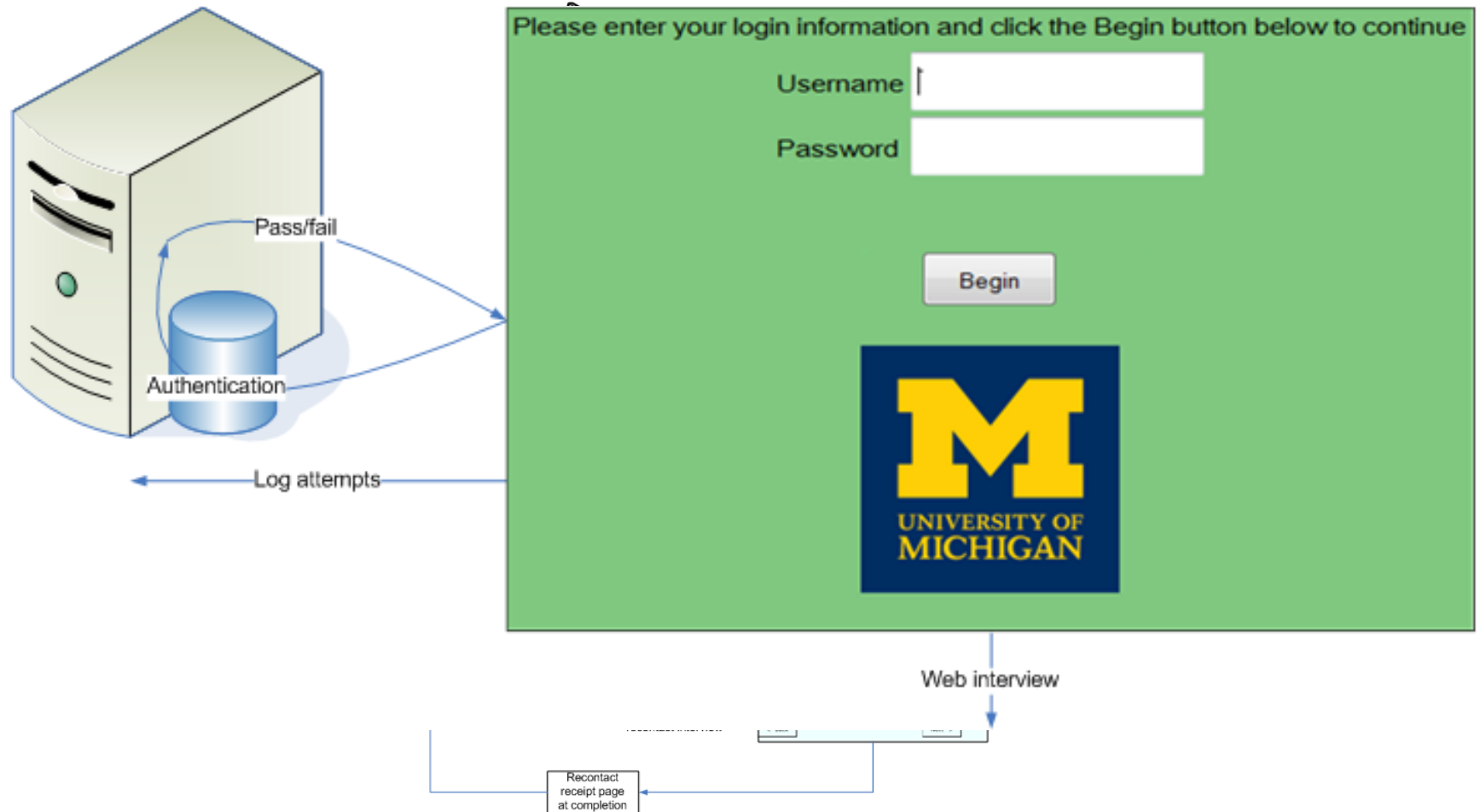


# Web Respondent Process

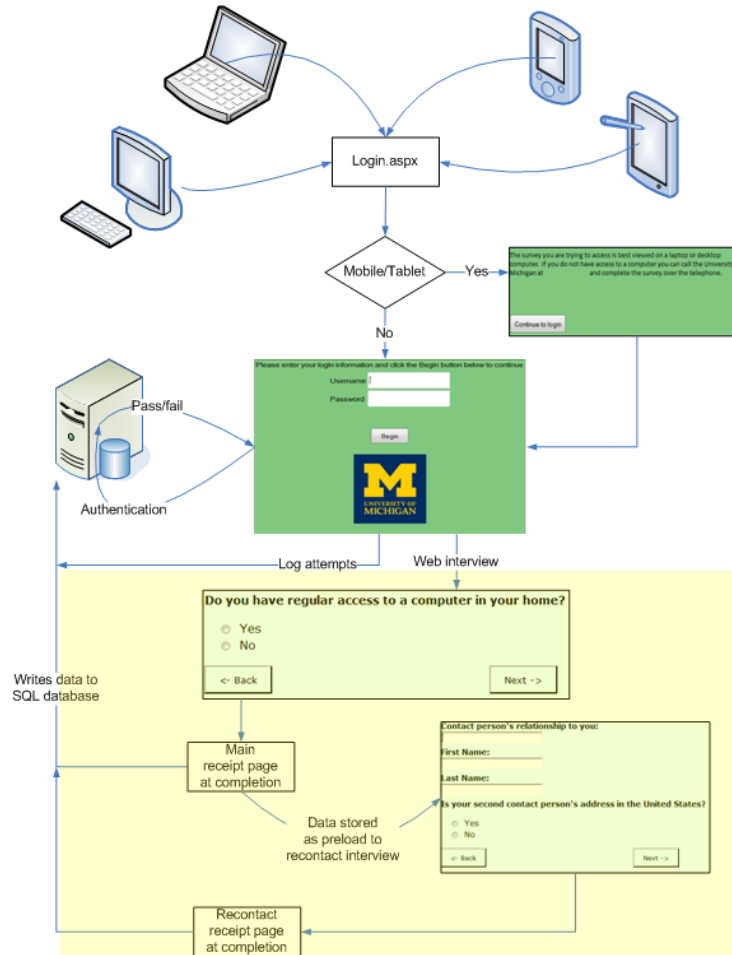




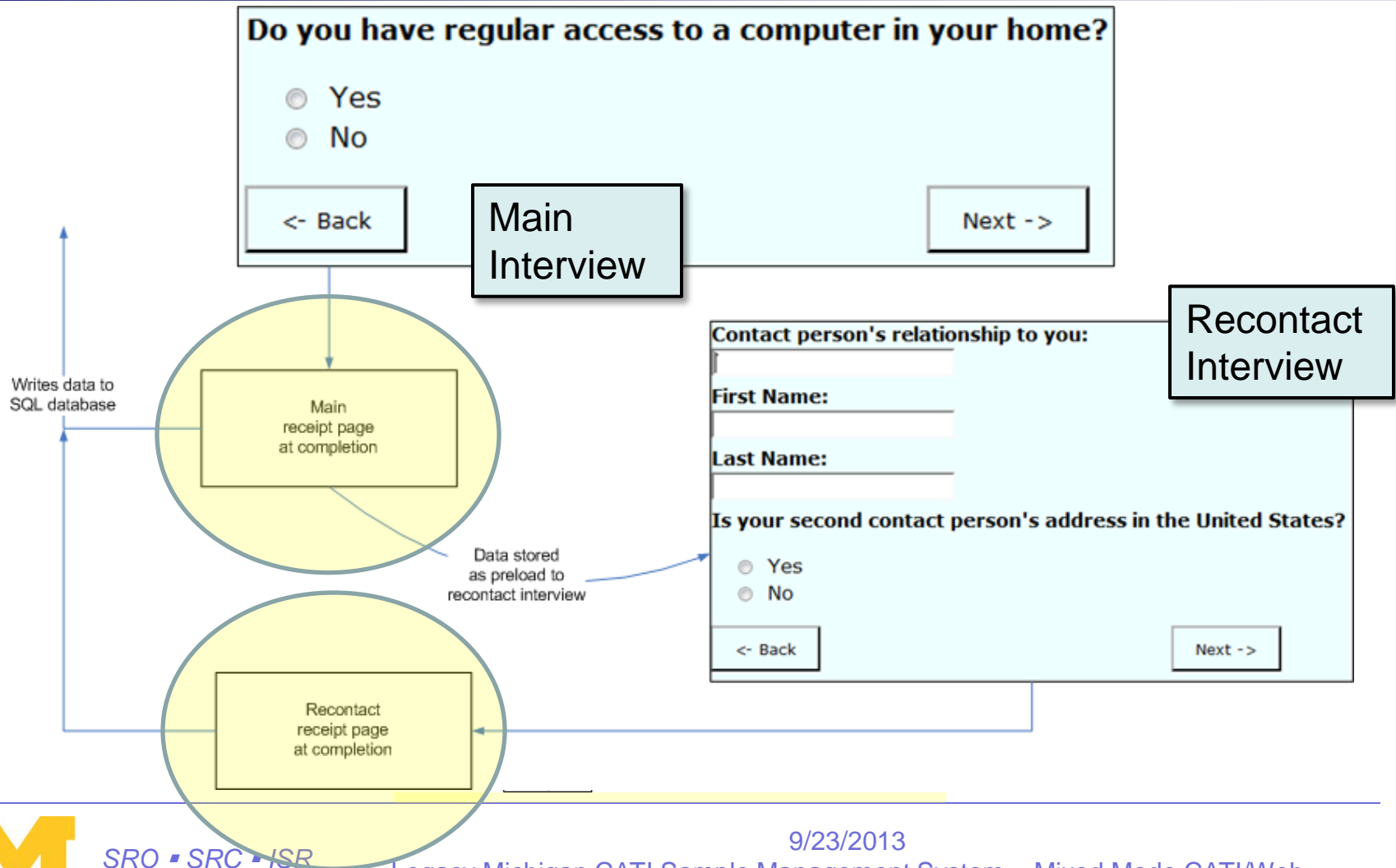
# Web Respondent Process



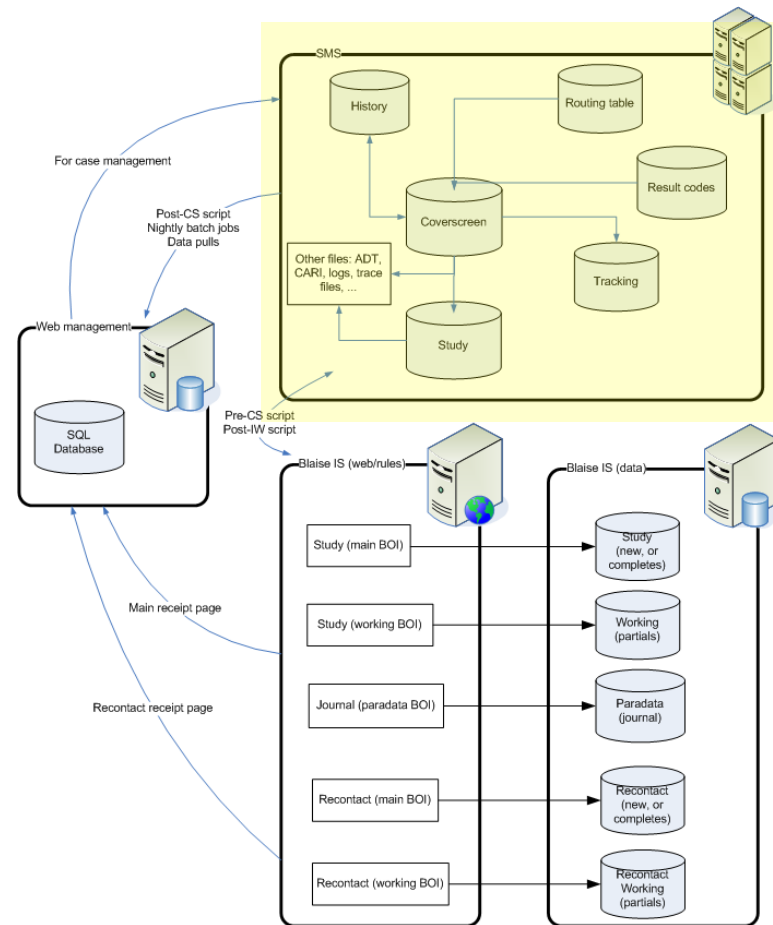
# Web Respondent Process



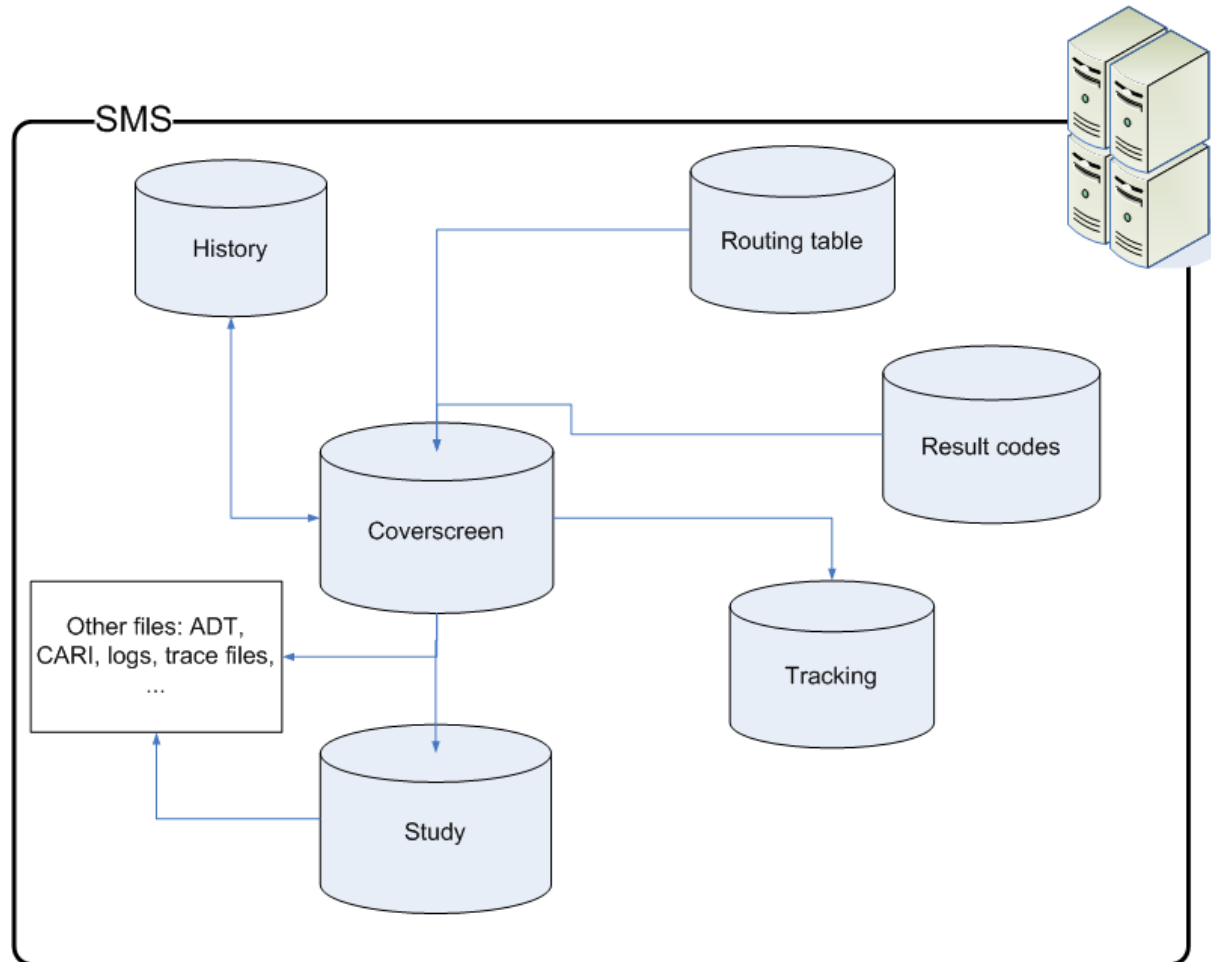
# Web Respondent Process



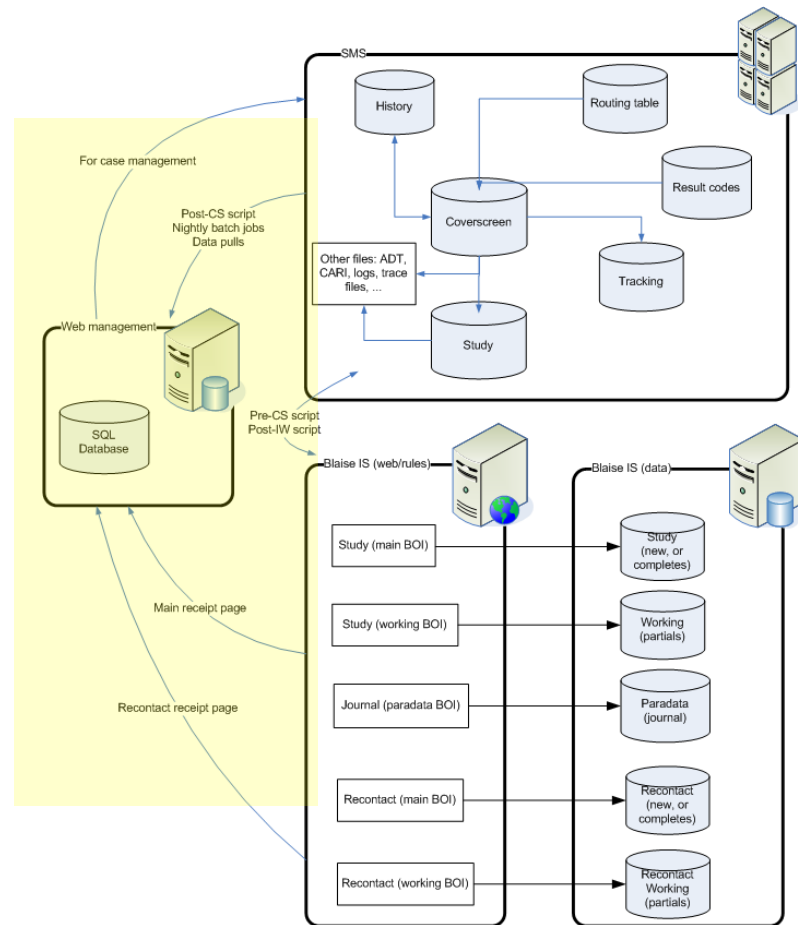
# Servers and Databases



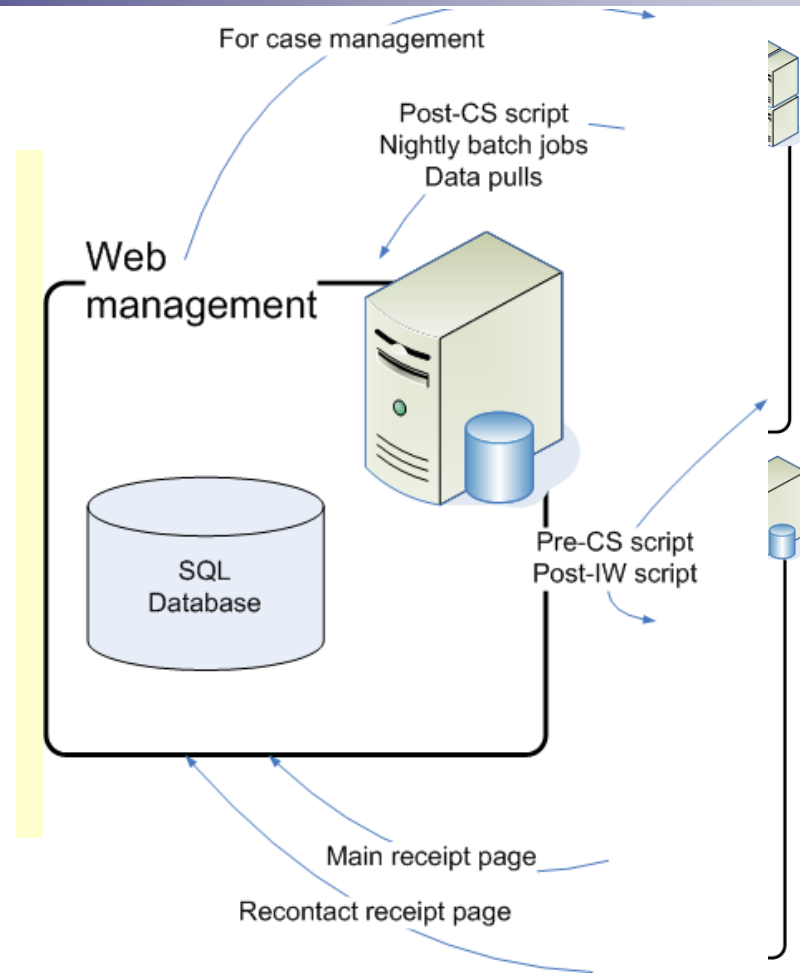
# Servers and Databases



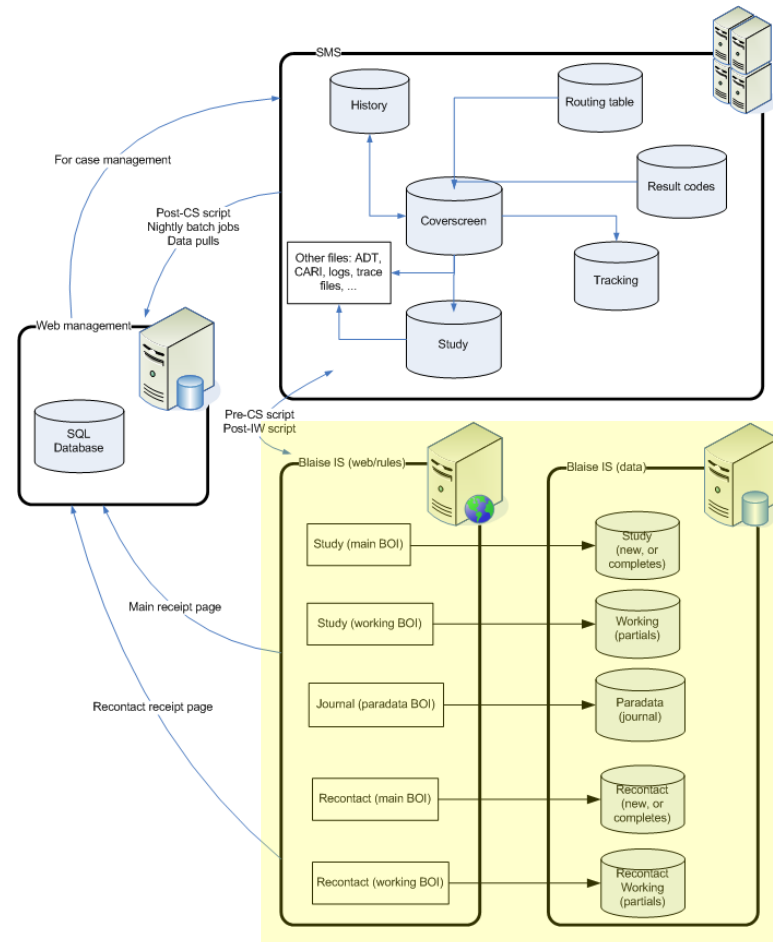
# Servers and Databases



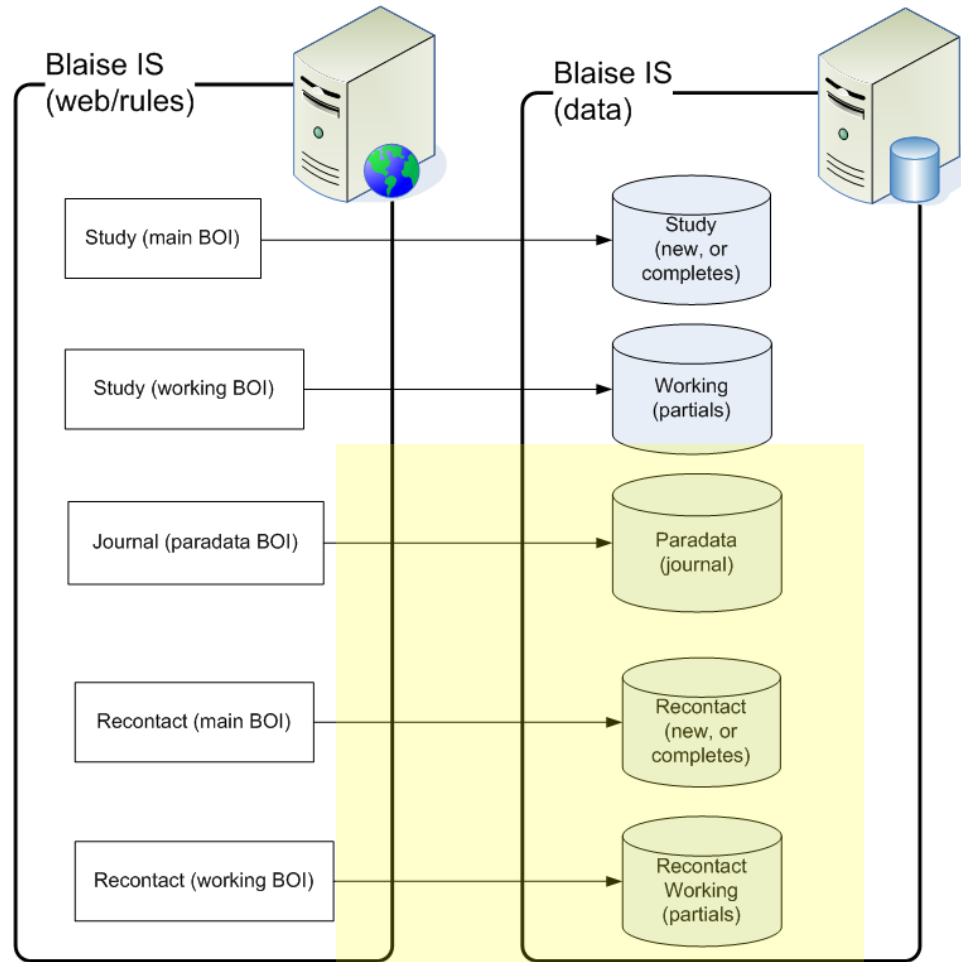
# Servers and Databases



# Servers and Databases

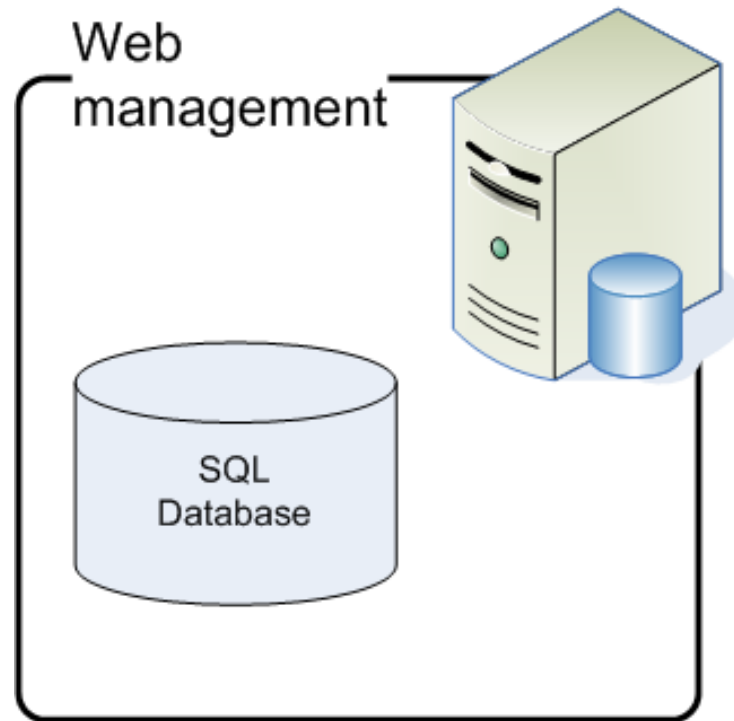


# Servers and Databases



# Mixed Mode

- Blaise IS/Web Management
- Case Locking



# Mixed Mode

- Interface & usability

The screenshot displays a mixed-mode CATI/IVR interface. The top portion shows a script for an interviewer, including a greeting, a question about the contact person's name, and instructions for handling 'Yes' and 'No' responses. The bottom portion shows a data entry screen with fields for 'dialed right number', 'good time for interview', and 'agree to record interview', each with a corresponding checkbox.

Forms Answer Navigate Options Help

Hello, my name is [INTERVIEWER NAME]. I am calling from the University of Michigan. I dialed the right number. Is this [CONTACT PERSON'S NAME]?

Am I speaking with [John Smith]?

1. Yes continue

5. No Say, "We are trying to reach [John Smith] in regard to a research study that [John Smith] is participating in with the University of Michigan. Could you please tell me the best number at which to reach [John Smith]? If number given, record number in telephone field on Blaise screen (this will load into the field TrackPhone1 on coverscreen and into the TrackPhone1 field on the 3rd tab of the coverscreen). Thank Informant and end the call. Record call note as appropriate and move to next case.

And what would be the best time to reach [John Smith]? Record all information given in the fields provided, and probe for time zone, if not stated.-e.g., Day of Week ("M,T,W,Th,F,Sat,Sun"); Date ("after July 23rd; he's currently undergoing a medical procedure"); Time ("between 6pm and 9pm"); Time Zone ("would that be EST?"). Thank Informant, and close the call. Record your observation, apply the proper result code as relevant to the information given/type of callback set (see Section 7.1, "Result Codes"), and record your complete call note including updated contact information. Then move to the next case.

•IF NO, REDIAL

1. Yes  
 5. No

dialed right number

good time for interview

agree to record interview

This close-up shows the contact information section of the form. It includes a header for 'Contact person's relationship to you:', followed by a text input field. Below this are fields for 'First Name:' and 'Last Name:'. A question asks 'Is your second contact person's address in the United States?' with radio button options for 'Yes' and 'No'. At the bottom are 'Back' and 'Next' navigation buttons.

Contact person's relationship to you:

\_\_\_\_\_

First Name:

\_\_\_\_\_

Last Name:

\_\_\_\_\_

Is your second contact person's address in the United States?

Yes  
 No

<- Back

Next ->



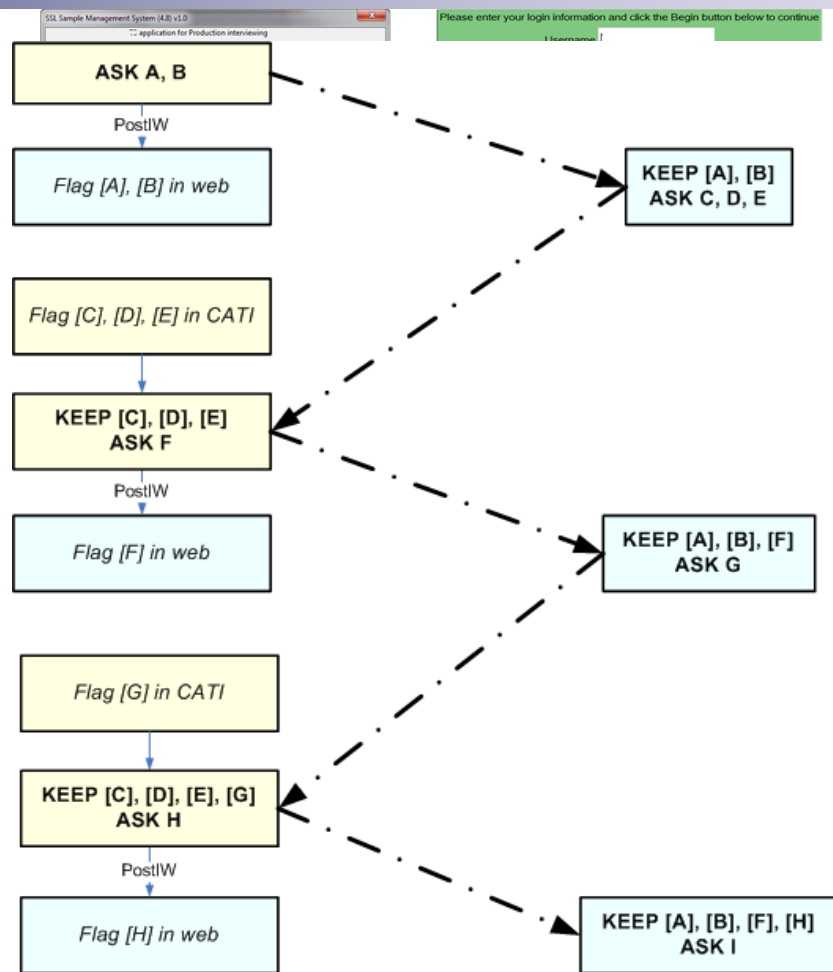
# Mixed Mode

- Testing
- Development environment
- Security



# Mixed Mode

- Interviews
- Mode Switch



# Lessons Learned

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- One system controls management of sample
- BOI files accessing auto increment SQL tables
- Data flow and section management control very important
- Testing
- Enough time for specs, test, revise, ...
- Programmer's "alone time"
- Blaise IS data to web management system



# Conclusion

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- SMS: project-specific implementation isolated mixed mode from other studies.
- SMS: though legacy, still versatile
- Manipula/Maniplus extremely powerful
- Planning is key
- Coordinated effort between systems
- Data model migration requires careful attention to detail.



# Contact Information

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David Dybicki, [ddybicki@umich.edu](mailto:ddybicki@umich.edu)

Peter Sparks, [zebulon@umich.edu](mailto:zebulon@umich.edu)

