

The IRRI logo consists of the letters "IRRI" in a green, serif font. To the right of the text is a horizontal bar divided into two segments: a yellow segment on the left and a green segment on the right. The background of the slide features a close-up of a rice flower in the top left corner and a stylized, semi-transparent graphic of a rice plant stalk with a circular pattern of nodes on the left side.

IRRI

ICIS Installation Diagnostic Tool v5.5.1.5

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The CIMMYT logo features a stylized white icon of a wheat stalk to the left of the text "CIMMYT" in a white, serif font. A small "MR" trademark symbol is located at the bottom right of the text. The background of the slide includes a green wavy shape at the bottom, suggesting a field or landscape.

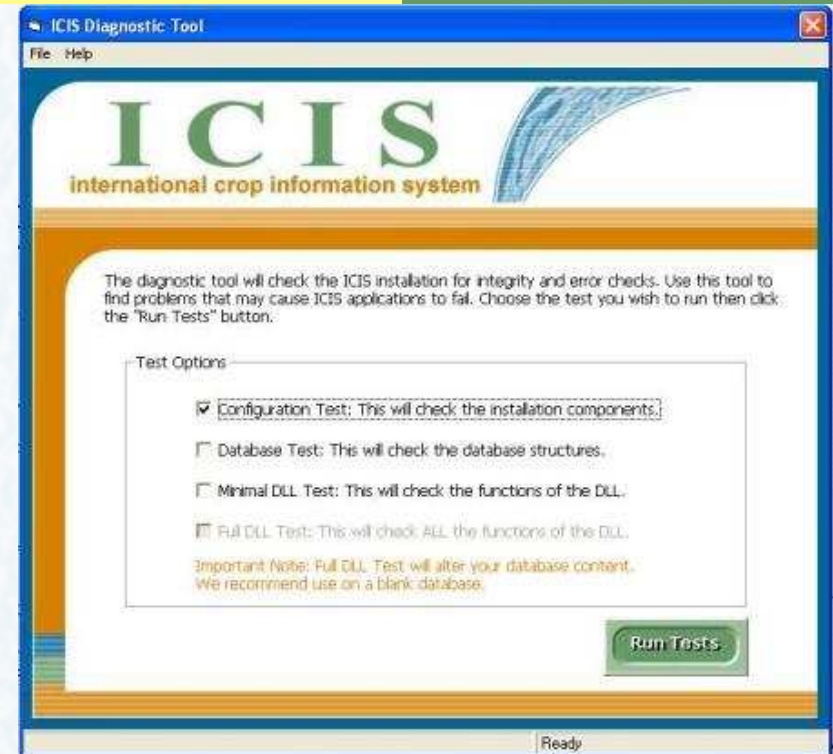
 CIMMYT^{MR}

Objectives of the tool

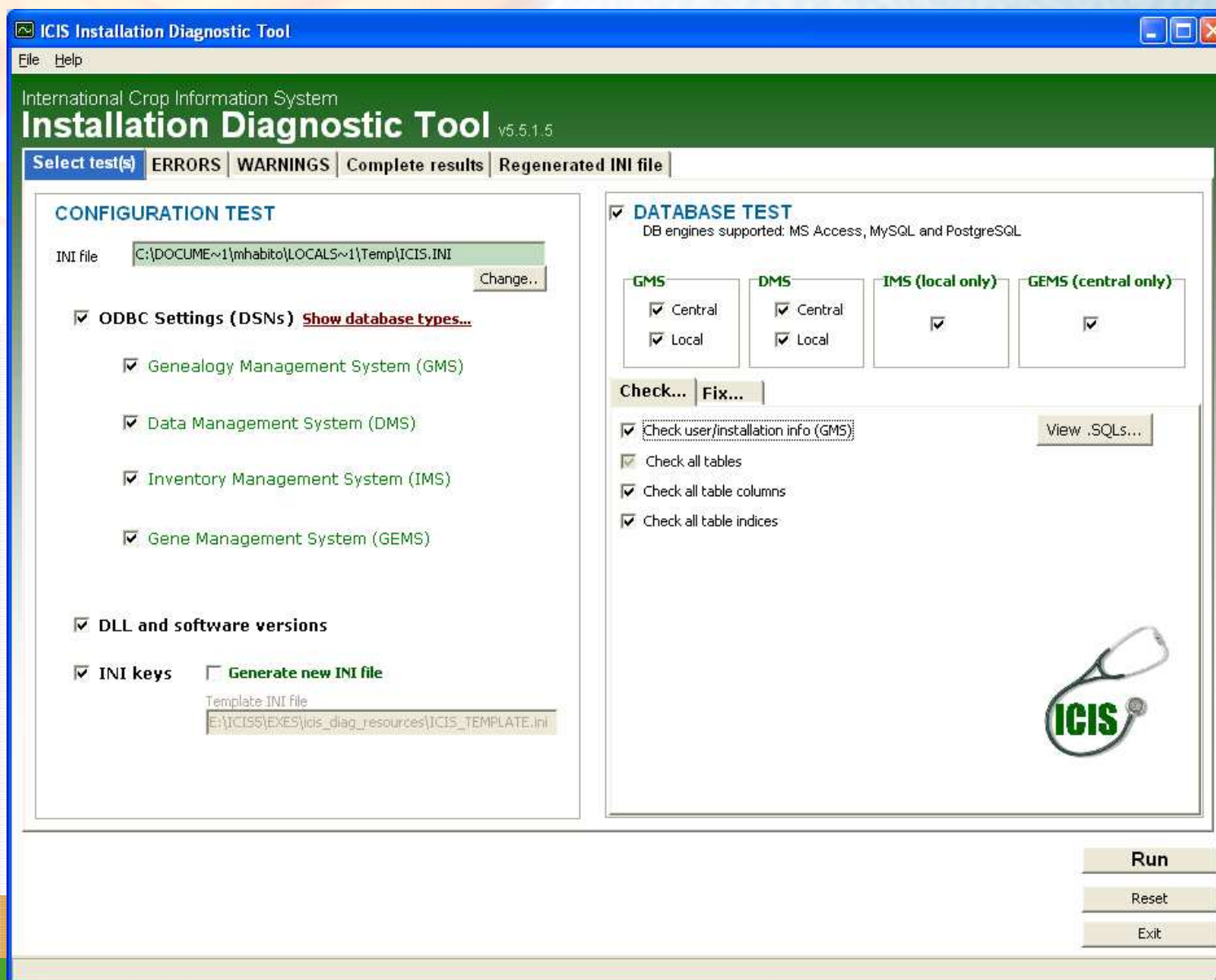
- **Identify** the installation/ICIS package problem
- **Recommend a solution** to the installation problem
- **Perform an automatic fix** (in some cases)

Background

- **2006:** First introduced at ICIS Developers' Workshop as “**ICIS System Integrity Diagnostics Tool**”. Was only “reporting tool” then.
- **2007:** Original Visual Basic prototype translated to Delphi and officially released as part of the ICIS 5.4 package. “Automatic fix” functionalities introduced.
- **2008:** Enhancement of “automatic fix” capabilities (including creation of missing database tables) and improvement of reporting format



Overview of features: User interface



Overview of features

- **Works on 3 database backends**
 - MS Access
 - PostgreSQL
 - MySQL
- **2 main components:**
 - Configuration Test
 - Database Test

Overview of features: Configuration Test


CONFIGURATION TEST

INI file

ODBC Settings (DSNs) [Show database types...](#)

- Genealogy Management System (GMS)
- Data Management System (DMS)
- Inventory Management System (IMS)
- Gene Management System (GEMS)

DLL and software versions

INI keys **Generate new INI file** 

Template INI file

- Check ODBC settings
- Check ICIS DLL and software versions
- Check ICIS INI keys
 → *new feature: generate new INI file*

Overview of features: Database Test

“CHECK” panel...

- Check structure of databases (local & central)
- Check information in USERS & INSTLN tables (GMS)

DATABASE TEST
 DB engines supported: MS Access, MySQL and PostgreSQL


GMS	DMS	IMS (local only)	GEMS (central only)
<input checked="" type="checkbox"/> Central <input checked="" type="checkbox"/> Local	<input checked="" type="checkbox"/> Central <input checked="" type="checkbox"/> Local	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Check user/installation info (GMS)

Check all tables

Check all table columns

Check all table indices



Overview of features: Database Test

“FIX” panel...

Automatic modification of databases to ICIS Schema v5.5:

- Create missing tables **NEW**
- Create / alter table columns
- Create / alter table indices
- Populate tables with data **NEW**
(LEVELS,STEFFECT,OBSUNIT,REPRESTN)
- Fill NULL columns with default values
(0 if numeric,“-” if text) **NEW**
- Re-assign unique sequential LRECIDs
in LISTDATA table **NEW**

DATABASE TEST
DB engines supported: MS Access, MySQL and PostgreSQL

GMS	DMS	IMS (local only)	GEMS (central only)
<input checked="" type="checkbox"/> Central <input checked="" type="checkbox"/> Local	<input checked="" type="checkbox"/> Central <input checked="" type="checkbox"/> Local	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Check... Fix...

Automatic modification/upgrade (ICISAutoMod) to ICIS v5.5

SCHEMA

- Create missing tables
- Create/alter table columns
- Create/alter table indices (Note: Indices improve performance of ICIS applications)

DATA

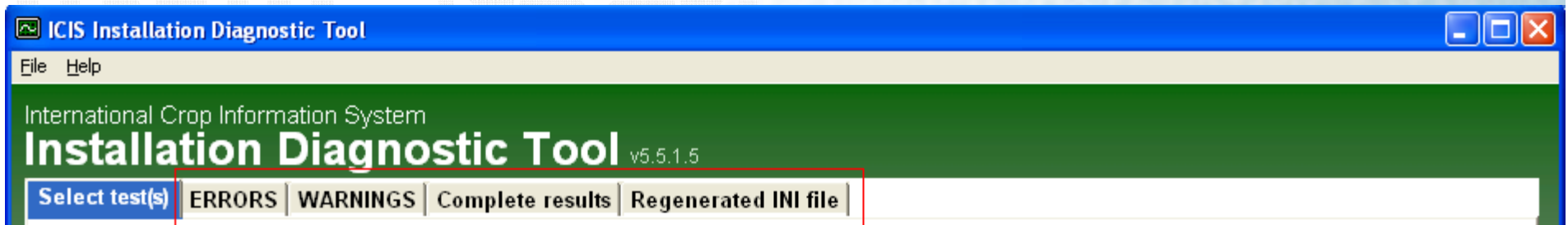
- Populate/update table data (new tables: LEVELS,OBSUNIT,REPRESTN,STEFFECT)
- Fill NULL columns with default values
 - STUDY table only All tables

Other procedures

- Re-assign unique sequential LRECIDs in GMS.LISTDATA table

Overview of features: Miscellaneous

- **Diagnostic results are grouped into four panels:**
 1. Errors only.
 2. Warnings only.
 3. Complete results
 4. Contents of regenerated INI file *(if user opted to generate a new INI)*



Overview of features: Miscellaneous

- Improved reporting format: **NEW**
 - Error and warning messages now grouped by categories and neatly organized in listviews
 - More informative summaries & recommendations
 - Easier to see if problem has been automatically corrected or not

ICIS Installation Diagnostic Tool


File Help

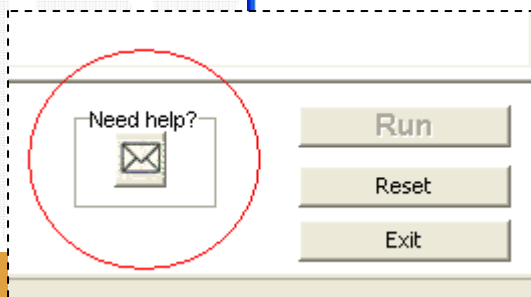
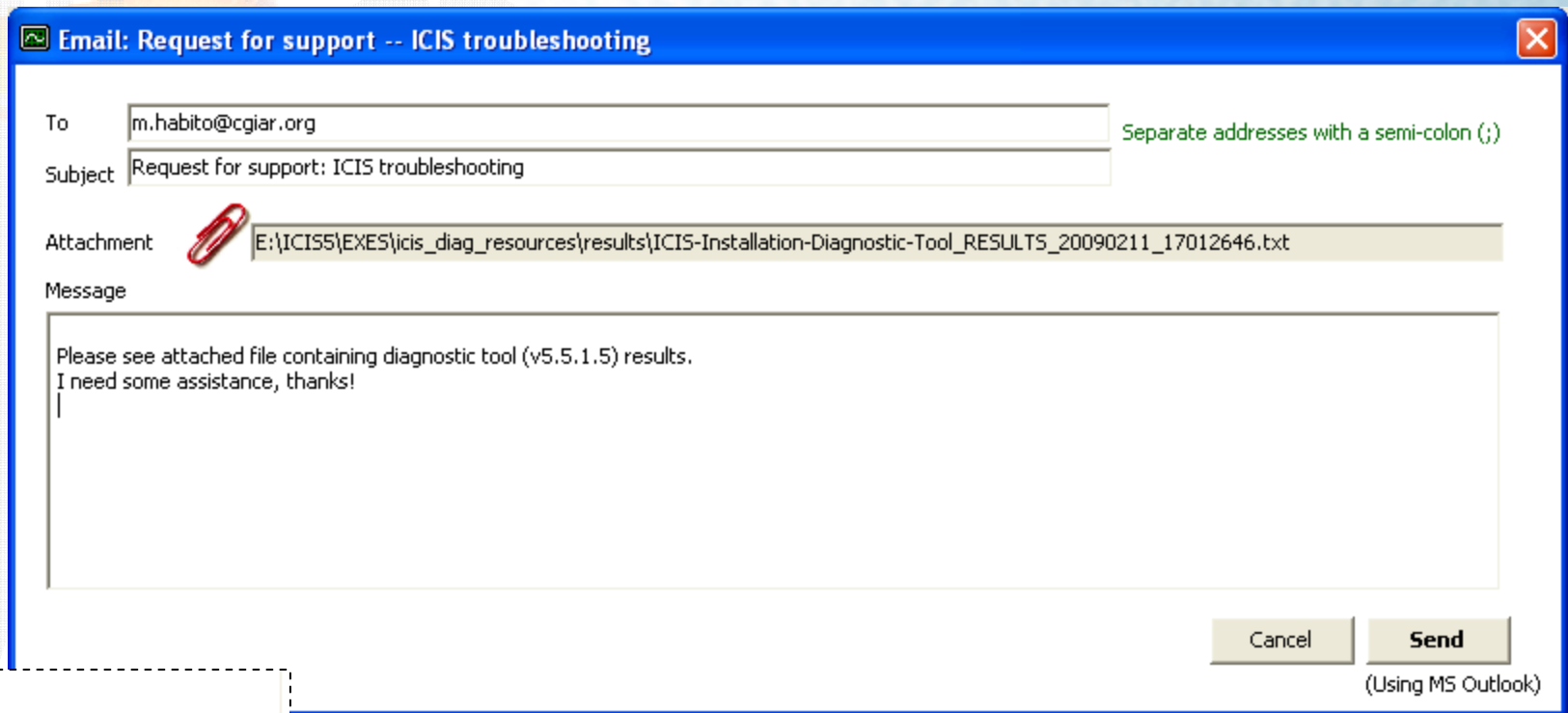
International Crop Information System
Installation Diagnostic Tool v5.5.1.5

Select test(s) **ERRORS (17)** WARNINGS (62) Complete results Regenerated INI file

Error Code	Summary	Category	Recommendation	Corrected?
Error-0020	Missing INI section [Central GEMS] / No DSN specified under section [Central G...	[Central GEMS] INI Sectio...	Add section [Central GEMS] to your ICIS configuration (.INI) file / Spe	
Error-0019	Missing INI key and/or value for key "LASTDIR" under section [DLL SETTINGS] ...	[DLL SETTINGS] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "DEBUG" under section [DLL SETTINGS] o...	[DLL SETTINGS] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "DEF_TAB" under section [GMSSRCH] of t...	[GMSSRCH] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "SEEDSTORAGELOCATION" under section...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "SEEDSTOCKTRAIT" under section [INTR...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "LABEL1" under section [INTRACK] of the...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "LABEL2" under section [INTRACK] of the...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "LABEL3" under section [INTRACK] of the...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "LABEL4" under section [INTRACK] of the...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "PREFIX" under section [INTRACK] of the...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "DEF_CNTRYID" under section [INTRACK]...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "SHOWBALANCE" under section [INTRAC...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "DEF_LBLTYPE" under section [INTRACK] ...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "LABEL_TITLE" under section [INTRACK] ...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "LABEL_LOGO" under section [INTRACK] ...	[INTRACK] INI Key	Enable the "Generate new INI file" option	No
Error-0019	Missing INI key and/or value for key "FILE" under section [GEMS Catalog] of t...	[GEMS Catalog] INI Key	Enable the "Generate new INI file" option	No

Overview of features: Miscellaneous

- **Email diagnostic results to ICIS team member for support** 
- User may immediately send an email with the diagnostic results as attachment



(frequently used within IRRI)

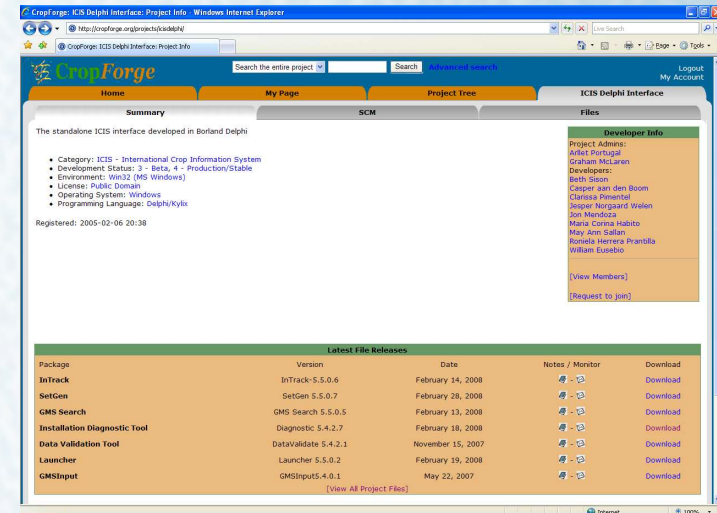


Moving forward...

- Further testing on different database backends

Download and documentation

- You may download the Installation Diagnostic Tool at:
<http://cropforge.org/projects/icisdelphi/>



- Documentation

http://cropwiki.irri.org/icis/index.php/Diagnostic_Tool_5.5