



IBM Software Group

DB2 Express-C 9 overview course

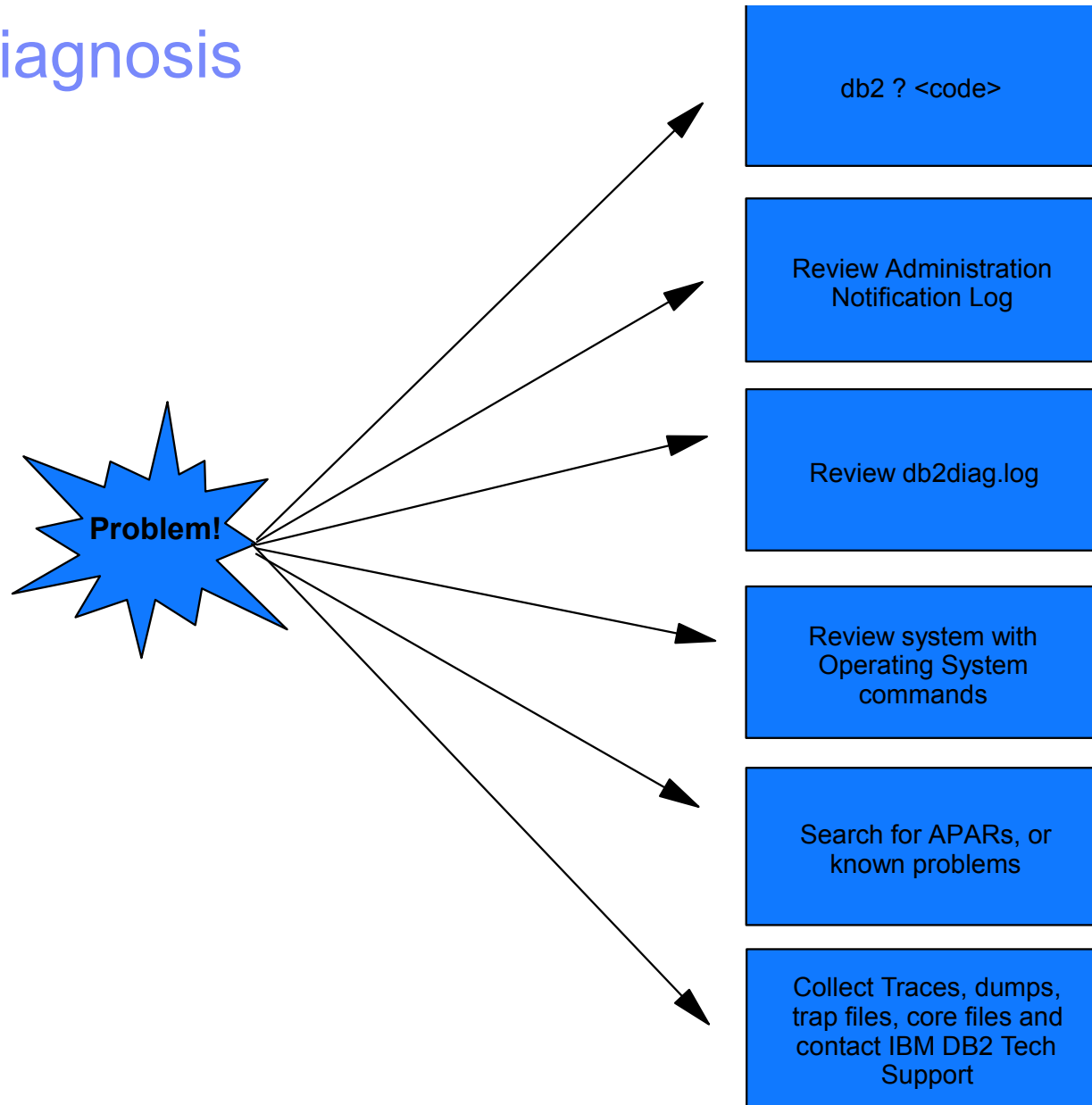
Introduction to Troubleshooting

DB2 Information Management Software

A horizontal decorative bar spanning the width of the slide, composed of various colored squares and rectangles in shades of green, yellow, red, and blue.

ON DEMAND BUSINESS™

Problem Diagnosis



db2 help: ?

db2 ? SQL0104N

db2 ? SQL104N

db2 ? SQL-0104

db2 ? SQL-104

db2 ? SQL-104N



SQLCODE and SQLSTATE Meaning

- SQLCODE
 - ▶ SQLCODE = 0; the command was successful
 - ▶ SQLCODE > 0; the command was successful, but returned a warning
 - ▶ SQLCODE < 0; the command was unsuccessful and returned an error
- SQLSTATE
 - ▶ SQLSTATE is a five-character string that conforms to the ISO/ANSI SQL92 standard
 - First two characters are known as the SQLSTATE class code
 - Class code of 00 means the command was successful
 - Class code of 01 implies a warning
 - Class code of 02 implies a not found condition
 - All other class codes are considered errors



DB2 Administration Notify Log

- Log with diagnosis information at the point failure
- On Linux/UNIX platforms, the administration notification log is a text file called `instance.nfy`
- On Windows, all administration notification messages are written to the Event Log
- The DBM configuration parameter **notifylevel** specifies the level of information to be recorded:
 - ▶ 0 -- No administration notification messages captured (not recommended)
 - ▶ 1 -- Fatal or unrecoverable errors
 - ▶ 2 -- Immediate action required
 - ▶ 3 -- Important information, no immediate action required (default)
 - ▶ 4 -- Informational messages



db2diag.log

- The information in the db2diag.log includes:

- ▶ The location reporting an error. Application identifiers allow you to match up entries pertaining to an application on the db2diag.logs of servers and clients.
- ▶ A diagnostic message (beginning with "DIA") explaining the reason for the error.
- ▶ Any available supporting data, such as SQLCA data structures and pointers to the location of any extra dump or trap files.

- Entries in the db2diag.log:

- ▶ Administrative events - i.e. backup/restore start and finished.
- ▶ Error information
 - Other information, including pointers to dump files



Locating db2diag.log

- WIN NT/2000 (default)
 - ▶ ...\\sqllib\\<instance name>\\db2diag.log
- UNIX (default)
 - ▶ .../sqllib/db2dump/db2diag.log
- optional: set alternate location in dbm cfg
 - ▶ db2 update dbm cfg using diagpath <path>
- The verbosity of diagnostic text is determined by dbm cfg (diaglevel)
 - ▶ range is 0 to 4 (default is 3)
 - ▶ most verbose is 4



Demo: Information Center & developerWorks

- Can use local version or internet version for the Information Center:
 - ▶ <http://publib.boulder.ibm.com/infocenter/db2luw/v9/index.jsp>
- DB2 developerWorks
 - ▶ <http://www-128.ibm.com/developerworks/db2/>

