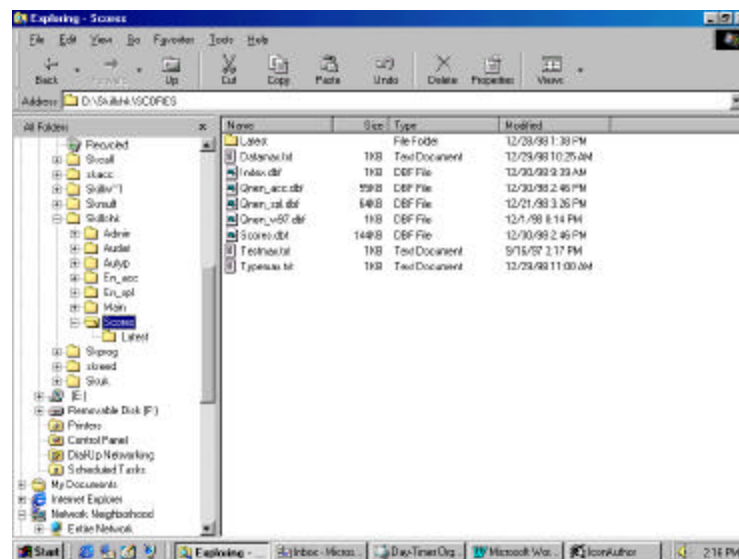

SkillCheck Scores Databases

All scores for tests taken with the SkillCheck Professional testing system are stored in databases. Normally, test administrators retrieve information from these databases using the SkillCheck Database Viewer that allows for the creation of reports based on stored test scores.

Some customers may need to directly access the SkillCheck scores database files in order to allow computerized search and retrieval systems to directly import test scores or link SkillCheck with a third-party training program. This document explains how SkillCheck scores databases are formatted and structured, giving developers who may be interested in integrating SkillCheck with other products the information they need to understand how the SkillCheck Professional system stores data.

SkillCheck Databases



Databases containing scores for SkillCheck tests are stored in the SKILLCHK\SCORES subdirectory.

As illustrated above, all scores database files within SkillCheck are stored in a subdirectory of the SKILLCHK directory named SCORES. (In most cases, the SKILLCHK directory is located off the root directory of a PC's hard disk.)

SkillCheck databases are in dBASE IV format and all file names end with the extension .DBF.

There are two types of database files located in SKILLCHK\SCORES:

- The SCORES.DBF file contains information on each test taken with the SkillCheck Professional system. For example, if a candidate takes a single Word 97 test, information on that test (the candidate's first name, last name, ID number, as well as overall test scores, topic and level scores) are stored in a single record in the SCORES.DBF database.

If a single candidate takes three different SkillCheck tests, three records will appear in SCORES.DBF, one for each test. Each record will contain complete information about the candidate and test scores (the candidate's first name, last name, ID number, as well as overall test scores, topic and level scores). Candidate information is not stored separately from test scores.

- Databases whose names begin with the letters QN (such as QNEN_W6.DBF or QNEN_X97.DBF) contain information on each question answered in a SkillCheck Software Skills or Professional Skills test. These databases are organized per product. For example, the database QNEN_W97.DBF contains information on each question answered by an examinee on any Word 97 test. Within the SkillCheck product, you may have several tests covering different aspects of Microsoft Word 97 (a Standard Test, a Basic and Advanced Skills test, a New Features test, or various custom tests). Each time any examinee answers any question in any of these Word 97 tests, a new record is created in the appropriate QN database.

As examinees answer questions in a SkillCheck Software Skills or Professional Skills test, the appropriate QN_*.DBF database file is populated. Once the candidate has answered all questions in the test, information in the QN*.DBF file is used to generate the percentage scores which are then copied into the SCORES.DBF database.

Scores for typing, data entry or multiple-choice tests created with the SkillCheck TestMaker product are written directly into SCORES.DBF at the end of a test. No additional QN*.DBF databases exist for these types of tests.

SCORES.DBF and QN*.DBF

Normally, on the information in the SCORES.DBF database is used to transfer test scores into a third-part search and retrieval system. SCORES.DBF stores overall test scores, as well as topic and level scores for each test. For typing and data entry tests, SCORES.DBF stores statistical information on typing and data entry speed.

The QN*.DBF database files store detailed information on each question answered correctly and incorrectly. This detailed information is normally not needed after a test is completed. However, data in the QN*.DBF files may be useful for those integrating SkillCheck into some third-party training program.

The format of the SCORES.DBF dBASE IV file is as follows:

FIELD NAME	FIELD TYPE	WIDTH (in characters)	DESCRIPTION
INDEX	Number	5	A unique index number assigned to each record in the database. (Note: These indexes are used to match up a record in SCORES.DBF with detailed information stored in the appropriate QN*.DBF database.)
FIRST	Text	40	Examinee's first name (specified during test registration)
LAST	Text	40	Examinee's last name (specified during test registration)
ID	Text	40	Examinee's ID number (specified during test registration)
DATFILE	Text	12	N/A (for programming usage only)
STSFILE	Text	12	N/A (for programming usage only)
TEST	Text	50	Name of test
TYPE	Number	1	N/A (for programming usage only)
CURR_DATE	Text	15	Current date (in the format MM/DD/YY when SkillCheck is set US date format, DD/MM/YY when it is set for European date format)
DBDATE	Number	8	Date in the format YYYYMMDD (Note: The entry in this date field does not change date format within SkillCheck from US to European or vice versa.)
TIMESTRT	Text	5	Time the test began (in the format HH:MM using the 24 hour clock)
TIMEELAP	Number	4	Total test time (in minutes)
SCORETOT	Number	3	Percentage total test score
SCOREBEG	Number	3	Percentage score on beginner test items
SCOREINT	Number	3	Percentage score on intermediate test items
SCOREADV	Number	3	Percentage score on advanced test items
PROFNCY	Text	10	Rating of the candidate's productivity based on if they answered a software question by using shortcut keys whenever given the opportunity to do so. This productivity measurement is either High , Medium or Low .

NTOPICS	Number	2	Number of topics in the test
TOPIC1 - TOPIC30	Text	40	Name of a topic in the test. (Note: A test can have up to 30 topics, although most will have fewer.)
SCORE1 – SCORE 30	Number	3	Percentage score for the corresponding topic.
PRIMARY	Number	3	N/A (for programming usage only)
SECONDARY	Number	3	N/A (for programming usage only)
TERTIARY	Number	3	N/A (for programming usage only)
GROSS	Number	10	Gross typing or data entry speed (used for typing and data entry tests only). Typing tests store gross typing speed in words per minute. Data Entry tests store gross typing speed in keystrokes per hour.
ERRORS	Number	10	Number of errors (typing and data entry tests only)
ADJERRORS	Number	10	Adjusted errors (typing and data entry tests only). Typing tests store adjusted errors in words per minute. Data Entry tests store adjusted errors in keystrokes per hour.
NET	Number	10	Net typing or data entry speed (typing and data entry tests only). Typing tests store net typing speed in words per minute. Data Entry tests store net typing speed in keystrokes per hour.
GRADE	Text	25	Grade assigned to an overall test score (user defined text)
AGE	Number	2	Demographic information (currently not used)
RACE	Number	5	Demographic information (currently not used)
GENDER	Number	5	Demographic information (currently not used)
ABORIGINAL	Number	5	Demographic information (currently not used)
DISABLED	Number	5	Demographic information (currently not used)
COUNTRY	Number	5	N/A (for programming usage only)
MISC1	Text	25	N/A (for programming usage only)
MISC2	Text	25	N/A (for programming usage only)
MISC3	Text	25	N/A (for programming usage only)
MISC4	Text	25	N/A (for programming usage only)
MISC5	Text	25	N/A (for programming usage only)

The format of the QN*.DBF dBASE IV files are as follows:

FIELD NAME	FIELD TYPE	WIDTH (in characters)	DESCRIPTION
INDEX	Number	5	A unique index number assigned to each test taken by an examinee. Each question in the test is assigned the same index number in the QN*.DBF database. Candidate information corresponding to the index in the QN*.DBF field appears in the INDEX field of SCORES.DBF.
QNUM	Number	3	Question number based on ordering of questions in the specific test
QNID	Text	4	Question ID number (for programming purposes only)
QUESTION	Text	40	Question name (identifier/objective)
FINAL	Text	25	Whether the examinee answered the question Correct , Incorrect , or Incomplete (skipped).
WRONG	Text	100	Text describing what the candidate did wrong if they answered the question incorrectly.
LEVEL1	Text	3	Level assigned to the question
TOPIC	Text	40	Topic assigned to the question

Using SkillCheck Scores

If you plan to export scores from the SkillCheck scores databases to another application, such as a search-and-retrieval system or training product, keep in mind that these databases are being written to and read from frequently whenever testing and report generation is taking place.

To prevent conflicts, external applications should only access these databases when testing and reporting is not taking place. For example, if export to a search-and-retrieval system need only take place once a day, this export-import function should be performed when testing and reporting is not underway (such as at the end of the day).

When SkillCheck is run on a network, different nodes access scores databases simultaneously using Microsoft ODBC. If you plan to integrate the network version of SkillCheck with another product, or if you need to access the SkillCheck scores databases while testing is taking place, please contact SkillCheck at 1-781-229-8388 for more information on accessing SkillCheck scores via ODBC.