

# HotDocs Scripting Language Guidelines

## Fundamental Syntax Rules

### 1. Capitalization

- ALL instructions, functions, and operators MUST be in ALL CAPITALS
- Variable names must match exactly, including capitalization
- Keywords like `TRUE`, `FALSE`, `AND`, `END IF` must be in ALL CAPITALS

### 2. Literal Value Formatting

- Text literals must be in quotation marks (e.g., `"Sample Text"`)
- Number literals less than one must have a leading zero (e.g., `0.125`)
- Number literals cannot contain commas (use `1250`, not `1,250`)
- Date literals must be in format: `3 JUN 1990`

### 3. Spacing

- Components and operators must be separated by spaces
- Use consistent indentation for readability

## Allowed Value Types

Only use these value types:

- Text Value
- Number Value
- Date Value
- True/False Value
- List Value
- Record Value
- Record List Value
- Image Value

## Script Composition Guidelines

### Allowed Instructions

Use ONLY the following instruction categories:

## 1. Conditional Instructions

- IF
- ELSE IF
- ELSE
- END IF

## 2. Variable Manipulation

- SET
- INCREMENT
- DECREMENT
- CLEAR
- ERASE

## 3. Loop Instructions

- REPEAT
- END REPEAT
- WHILE
- END WHILE

## 4. List Processing

- FILTER
- FORMAT
- ASCEND
- DESCEND

## 5. Document Assembly

- INSERT
- ASSEMBLE
- ASK
- ADD
- QUIT
- LANGUAGE

## 6. Dialog Script Instructions (when applicable)

- HIDE
- HIDE ALL
- SHOW
- SHOW ALL
- GRAY

- GRAY ALL
- UNGRAY
- UNGRAY ALL
- REQUIRE
- REQUIRE ALL
- LIMIT
- DEFAULT

## Allowed Operators

### Comparison Operators

- =
- !=
- <
- >
- <=
- >=
- CONTAINS
- STARTS WITH
- ENDS WITH
- LIST CONTAINS EXPRESSION

### Arithmetic Operators

- +
- -
- \*
- /
- %

### Logical Operators

- AND
- OR
- NOT

## Allowed Functions

### Answer Functions

- ANSWERED
- COUNT
- COUNTER
- OTHER
- SELECTION
- SUM
- UNION
- VALUE
- ZERO

### **Text Functions**

- FIRST
- FORMAT
- INTEGER
- LAST
- LENGTH
- MID
- POSITION
- REPLACE
- SPACE
- STRIP
- TRIM

### **Date Functions**

- AGE
- DATE OF
- DAY OF
- DAY OF WEEK
- DAYS FROM
- MONTH OF
- MONTHS FROM
- TODAY
- YEAR OF
- YEARS FROM

### **System Local Variables**

- RESULT

- UNANSWERED
- ERRORTXT

## Mathematical Functions

- ABSOLUTE VALUE
- CEILING
- FLOOR
- MAX
- MIN
- POWER
- REMAINDER
- ROUND
- SQUARE ROOT
- TRUNCATE
- LOGARITHM
- NATURAL LOGARITHM

## Financial Functions

- FUTURE VALUE
- PAYMENT
- PRESENT VALUE
- RATE
- TERM

## Efficiency and Best Practices

1. Use local variables for temporary values
2. Consider using parameters for reusable computations
3. Utilize short-circuit evaluation with logical operators
4. Format scripts with consistent indentation
5. Test computations thoroughly
6. When working with dialog scripts:
  - Use ALL instructions when operating on multiple components
  - Place frequently used variables after ALL instructions
  - Use GRAY/UNGRAY for controlled component interaction

## Operator Precedence (Highest to Lowest)

1. ( )
2. NOT - %
3. \* /
4. + -
5. = != < > <= >=
6. AND
7. OR

## Three-Valued Logic Considerations

- Expressions can evaluate to TRUE, FALSE, or UNANSWERED
- If any element of an expression is UNANSWERED, the whole expression equals UNANSWERED
- Lists and records retain values even if individual elements are UNANSWERED

## Notes

- This is a strict interpretation of the HotDocs Scripting Language
- All scripts must adhere to these guidelines
- When in doubt, refer to the original Scripting Reference documentation