Technical Description of DriveOPC 2.06

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1. Preface

This technical description explains a new feature added into DriveOPC version 2.04. The new feature allows addition of new kinds of drives to be recognised by DriveOPC. So new kinds of drives can be introduced without making a new version of DriveOPC.

2. General

Previous version of DriveOPC contained only hard coded drive kind recognition algorithm. Introducing new kinds of drives needed recompilation of DriveOPC and a new version to be released, if a new kind of drive was added.

Now, before the hard coded algorithm, DWC_DEF.INI-file is checked, whether it contains information about the drive, which is to be classified. If information is not found, the hardcoded algorithm is used, otherwise the kind of the drive is taken from the INI-file.

Note that if you add a new kind of drive to DriveOPC, you need to introduce its Id Run parameters to DriveWindow 2 separately.

3. From DeviceID to Kind Property

DriveOPC uses the Identify Service of the DDCS SDP protocol to query DeviceID of the drive. Whitespace is removed and DeviceID is converted to upper case.

Next ID*n* and Kind*n* keys (*n* = 0, 1, ...) in the DriveKind section the DWC_DEF.INI are checked. Value of ID*n* is used as a case insensitive wildcard construct (? matches a single character and * matches zero or more characters). If the DeviceID matches ID*n*, value of Kind*n* is used as Kind property of the drive, and value of Code*n* (if any) is used as internal drive type within DriveOPC. If no Code*n* is given value 1 (DW_ACS600) is used.

Note that no ID*n* and Kind*n* value must be of zero length. There is no separate count key. Thus no *n* can be missing (checking ends when ID*n* or Kind*n* is not found).

If there was no match in the DWC_DEF.INI-file, the normal hard coded drive kind recognition algorithm is executed.

3.1. Special Internal Codes

Some drives have special code included in DriveOPC. The special code executed depends on the value of the internal drive type.

Drive Type	Internal Type Name	Special Code for
3	DW_ACC800	ACC600 (only in case it has a very old OS version)
10	DW_ACP600	Positional Drive
100	DW_NCB	AC80
200	DW_DCS600	DC Drive DCS600
220	DW_DCS800	DC Drive DCS800
810	DW_ACP800	Positional Drive

4. Hard Coded Kind Property

The hard coded drive kind recognition algorithm can be described in terms of the DWC_DEF.INI-file matching.

4.1. INI-File

If following text were included in DWC_DEF.INI, the behaviour of DriveOPC would be the same as if the hard coded drive kind recognition algorithm was executed.

```
[DriveKind]
Id0=ACP6*
Kind0=ACP600
Code0=10
Id1=ACF6*
Kind1=ACF600
Code1=11
Id2=DCS6*
Kind2=DCS600
Code2=200
Id3=DCS8*
Kind3=DCS800
Code3=220
Id4=ACSP*
Kind4=ACSPMM
Code4=401
Id5=ACS1*
Kind5=ACS1000
Code5=20
Id6=ACN6*
Kind6=ACN600
Code6=2
Id7=ACNP*
Kind7=ACNPMM
Code7=402
Id8=ACW6*
Kind8=ACW600
Code8=4
Id9=ACC6*
Kind9=ACC600
Code9=3
Id10=NTY*
Kind10=NTY
Code10=30
Id11=NCB*
Kind11=NCB
Code11=100
Id12=ACS6000C-CC*
Kind12=ACS6000C-CC
Code12=310
Id13=ACS6000C*
Kind13=ACS6000C
Code13=300
Id14=ACS6000SD-FE*
Kind14=ACS6000SD-FE
Code14=330
Id15=ACS6000SD*
Kind15=ACS6000SD
Code15=320
Id16=ACS8*
Kind16=ACS800
Code16=801
Id17=ACP8*
Kind17=ACP800
Code17=810
Id18=ACF8*
Kind18=ACF800
Code18=811
Id19=ACN8*
Kind19=ACN800
```

```
Code19=802
Id20=ACW8*
Kind20=ACW800
Code20=804
Id21=ACC8*
Kind21=ACC800
Code21=803
Id22=*
Kind22=ACS600
Code22=1
```

4.2. Tabular Form

The same information in tabular form is as follows:

ID to Match	Kind Property	Internal DriveType	
		Code	Name
ACP6*	ACP600	10	DW_ACP600
ACF6*	ACF600	11	DW_ACF600
DCS6*	DCS600	200	DW_DCS600
DCS8*	DCS800	220	DW_DCS800
ACSP*	ACSPMM	401	DW_ACSPMM
ACS1*	ACS1000	20	DW_ACS1000
ACN6*	ACN600	2	DW_ACN600
ACNP*	ACNPMM	402	DW_ACNPMM
ACW6*	ACW600	4	DW_ACW600
ACC6*	ACC600	3	DW_ACC600
NTY*	NTY	30	DW_NTY
NCB*	NCB	100	DW_NCB
ACS6000C-CC*	ACS6000C-CC	310	DW_ACS6000C_CC
ACS6000C*	ACS6000C	300	DW_ACS6000C
ACS6000SD-FE*	ACS6000SD-FE	330	DW_ACS6000SD_FE
ACS6000SD*	ACS6000SD	320	DW_ACS6000SD
ACS8*	ACS800	801	DW_ACS800
ACP8*	ACP800	810	DW_ACP800
ACF8*	ACF800	811	DW_ACF800
ACN8*	ACN800	802	DW_ACN800
ACW8*	ACW800	804	DW_ACW800
ACC8*	ACC800	803	DW_ACC800
*	ACS600	1	DW_ACS600

4.3. Additional Internal Drivetypes

In addition to the internal drivetype codes mentioned, DriveOPC has the following codes defined:

Internal DriveType	
Code	**Name**
40	DW_TSU
101	DW_CCB

5. Example

The following text in DWC_DEF.INI-file introduces a new kind of drive, DCS900, which is handled as a DC800 Drive by DriveOPC.

```
[DriveKind]
Id0=DCS9*
Kind0=DCS900
Code0=220
```