RPGLE & Db2 for i Data Types (7.5)

Fixed	Free	Db2 for i	Storage	Valid Values	SQLTYPE	DDS (PF)	DSPF	PRTF
B	BINDEC(p:s) {p∈ℤ | 1 ≤ p ≤ 4} {p∈ℤ | 5 ≤ p ≤ 9} {s∈ℤ | 0 ≤ s ≤ p}	SMALLINT INTEGER	2 bytes 4 bytes	-9999 to 9999 -999999999 to 999999999	500/501 496/497	B		
F	FLOAT(4)	FLOAT	4 bytes	-3.4028235E+38 to -1.1754944E-38 0.0E+0 +1.1754944E-38 to +3.4028235E+38	480/481	F FLTPCN(*SINGLE)		F
F	FLOAT(8)	FLOAT	8 bytes	-1.797693134862315E+308 to -2.225073858507201E-308 0.0E+0 +2.225073858507201E-308 to +1.797693134862315E+308	480/481	F FLTPCN(*DOUBLE)		F
I	INT(3) INT(5) INT(10) INT(20)	N/A SMALLINT INTEGER BIGINT	1 byte 2 bytes 4 bytes 8 bytes	-128 to 127 -32,768 to 32,767 -2,147,483,648 to 2,147,483,647 -9,223,372,036,854,775,808 to 9,223,372,036,854,775,807	N/A 500/501 496/497 492/493			
P	PACKED(p:s) {p∈ℤ | 1 ≤ p ≤ 63} {s∈ℤ | 0 ≤ s ≤ p}	DECIMAL(p,s)	1 ≤ [p/2] ≤ 32 bytes	$-1 \times 10^{63} - 1$ to $1 \times 10^{63} - 1$	484/485	P		
U	UNS(3) UNS(5) UNS(10) UNS(20)	N/A	1 byte 2 bytes 4 bytes 8 bytes	0 to 255 0 to 65,535 0 to 4,294,967,295 0 to 18,446,744,073,709,551,615				
S	ZONED(p:s) {p∈ℤ | 1 ≤ p ≤ 63} {s∈ℤ | 0 ≤ s ≤ p}	NUMERIC(p,s)	1 ≤ p ≤ 63 bytes	$-1 \times 10^{63} - 1$ to $1 \times 10^{63} - 1$	488/489	S	Yes	S
A	CHAR(n)	CHAR(n) (n ≤ 32,765) or CLOB (n > 32,765)	n bytes	{n∈ℤ | 1 ≤ n ≤ 16,773,104}	452/453 408/409	A	Yes	A
A	VARCHAR(n:b)	VARCHAR(n) (n ≤ 32,739) or CLOB (n > 32,739)	n+2 bytes	{n∈ℤ | 1 ≤ n ≤ 65,535} b∈{2,4} (optional)	448/449 408/409	A VARLEN(n)		
A	VARCHAR(n:b)	VARCHAR(n) (n ≤ 32,739) or CLOB (n > 32,739)	n+4 bytes	{n∈ℤ | 65,536 ≤ n ≤ 16,773,100} b∈{4} (optional)	448/449 408/409	A VARLEN(n)		
T	TIME{(format{separator})}	TIME	8 bytes	00:00:00 to 24:00:00	388/389	T	Yes	T
D	DATE{(format{separator})}	DATE	10 bytes	0001-01-01 to 9999-12-31	384/385	L	Yes	L
Z	TIMESTAMP(n) {n∈ℤ | 0 ≤ n ≤ 12}	TIMESTAMP(n)	n=0: 19 bytes n>1: 20 + n bytes	0001-01-01-00.00.00.000000 to 9999-12-31-24.00.00.000000	392/393	Z	Yes	Z

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Fixed	Free	Db2 for i	Storage	Valid Values	SQLTYPE	DDS (PF)	DSPF	PRTF
G C	GRAPH(n) UCS2(n)	GRAPHIC(n) (n ≤ 16,382) or DBCLOB (n > 16,382)	2n bytes	{n∈ℤ | 1 ≤ n ≤ 8,386,552}	468/469 412/413	G		
G C	VARGARPH(n:b) VARUCS2(n:b)	VARGRAPHIC(n) (n ≤ 16,369) or DBCLOB (n > 16,369)	2n+2 bytes	{n∈ℤ | 1 ≤ n ≤ 65,535} b∈{2,4} (optional)	464/465 412/413	G VARLEN(n)		
G C	VARGARPH(n:b) VARUCS2(n:b)	VARGRAPHIC(n) (n ≤ 16,382) or DBCLOB (n > 16,382)	2n+4 bytes	{n∈ℤ | 65,536 ≤ n ≤ 8,386,548} b∈{4} (optional)	464/465 412/413	G VARLEN(n)		
N	IND	BOOLEAN	1 byte	*ON or *OFF	2436			
*	POINTER{(*PROC)}	N/A	16 bytes					
O	OBJECT	N/A						
	SQLTYPE(BINARY:n)	BINARY	1 to 32,765 bytes	{n∈ℤ | 1 ≤ n ≤ 32,765}	912/913			
	SQLTYPE(BLOB:n)	BLOB	1 to 2,147,483,647 bytes	{n∈ℤ | 1 ≤ n ≤ 2,147,483,647}	404/405			
	SQLTYPE(CLOB:n)	CLOB	1 to 2,147,483,647 bytes	{n∈ℤ | 1 ≤ n ≤ 2,147,483,647}	408/409			
	SQLTYPE(DBCLOB:n)	DBCLOB	2n bytes	{n∈ℤ | 1 ≤ n ≤ 1,073,741,823}	412/413			
		DATALINK	1 to 32,718 bytes		396/397			
	SQLTYPE(ROWID)	ROWID	40 bytes		904/905			
	SQLTYPE(VARBINARY:n)	VARBINARY	1 to 32,739 bytes	{n∈ℤ | 1 ≤ n ≤ 32,739}	908/909			
	SQLTYPE(XML_BLOB:n) SQLTYPE(XML_CLOB:n) SQLTYPE(XML_DBCLOB:n)	XML	1 to 2,147,483,647 bytes	{n∈ℤ | 1 ≤ n ≤ 16,773,100} {n∈ℤ | 1 ≤ n ≤ 16,773,100} {n∈ℤ | 1 ≤ n ≤ 8,386,550}	988/989			
	SQLTYPE(RESULT_SET_LOCATOR	Result Set Locator	8 bytes		972			

References

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