

Data types

bitwidth	C	Java
8	unsigned char	byte
16	unsigned short	short
32	unsigned int	int
64	unsigned long	long

- Java char is already unsigned
- Presently no Java primitive as wide as unsigned long
- Java float and double don't seem to add much to the usability

		set	bits	get	
1	byte	->	8	->	byte
2	short	->	8	->	short
3	int	->	8	->	int
4	long	->	8	->	long

5	byte	->	16	->	byte
6	short	->	16	->	short
7	int	->	16	->	int
8	long	->	16	->	long

9	byte	->	32	->	byte
10	short	->	32	->	short
11	int	->	32	->	int
12	long	->	32	->	long

Eliminate the following rows:

- Identity adapters don't make sense since they are not unsigned (1,6,11)
- Narrower Java type to wider bitwidth don't make sense (5,9,10)
- Drop short as an adapter type, since it's as convenient to just use int (2)

That leaves rows : 3, 4, 7, 8, 12

int:byte, long:byte, int:short, long:short, and long:int