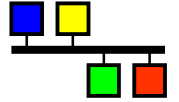




EPICS

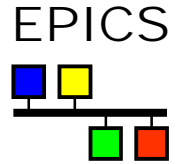


R3.15 Link Changes

Andrew Johnson
APS/ANL



Recap: Link Support



- ◆ Definable hardware address types

```
xy240(1,7)
```

```
can(sector2,20,0137,4,0x3ff)
```

```
db(S35:VVC4:open.STAT,PP,NMS)
```

- ◆ Defined in .dbd file

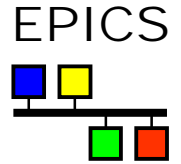
```
devicetype(mbbi,xy240,devMbbiXy240,"XYCOM XY240")  
{ fields ... }
```

```
linktype(DBF_INLINK,symbol,lnkInSymb,"Variable")  
{ fields ... }
```

- ◆ Routines defined using the usual function table approach



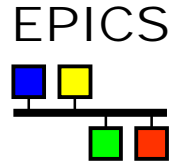
Progress to Date



- ◆ Poster paper discussed reimplementing dbStaticLib
- ◆ “Compiling .dbd files” idea looks very good
 - ◆ .dbd parsing code can use C++ facilities not available for or buggy in vxWorks/Tornado, without bloating iocCore
 - ◆ Code to generate compiled tables is now working
 - ◆ The tables it generates are very similar to the existing structures that are filled in by the .dbd file parser.
 - ◆ No changes needed to record support routines
 - ◆ Will remove complex .dbd file parsing routines from IOC
- ◆ New link definitions are handled by the new library
- ◆ Backwards compatibility will be kept as much as possible



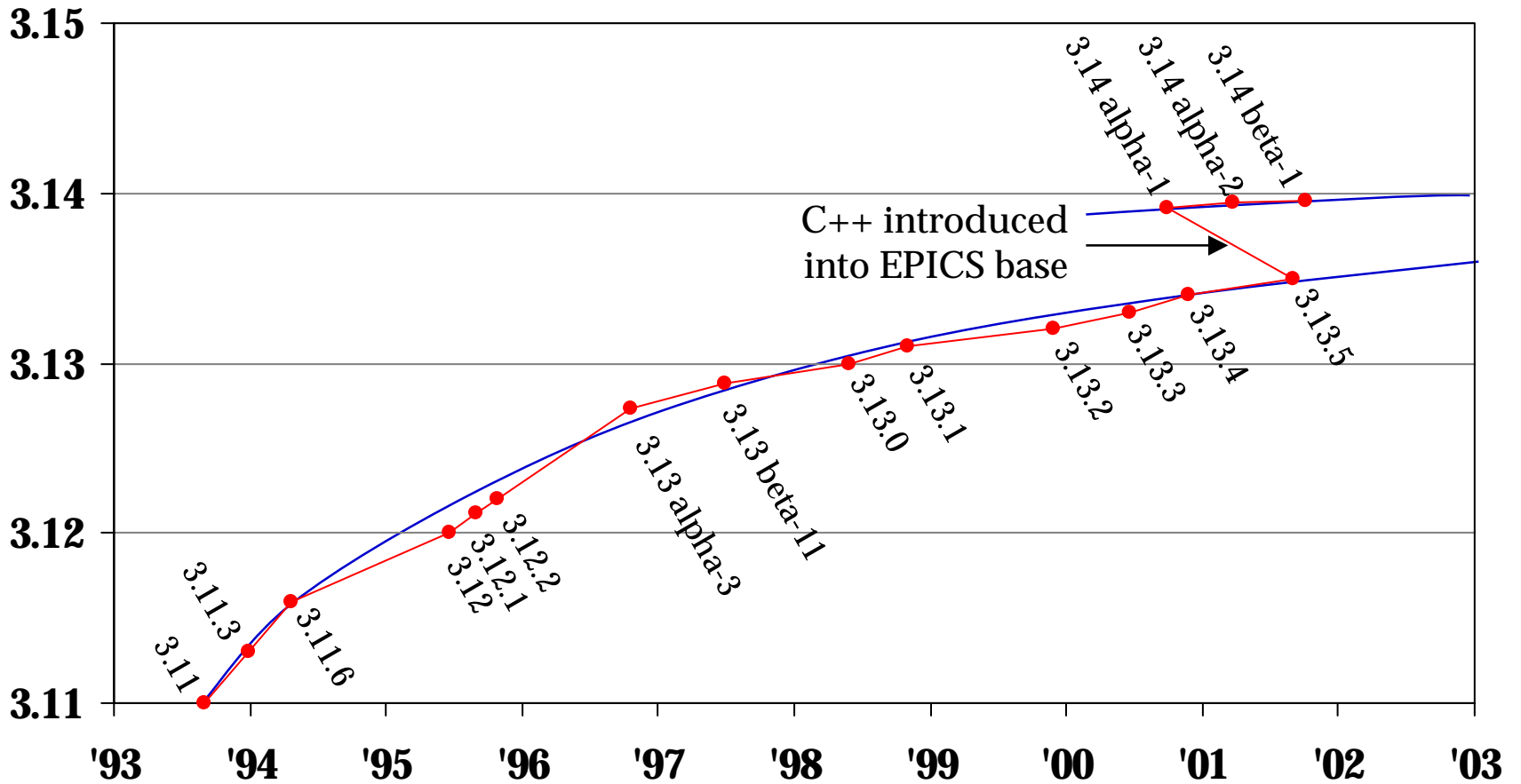
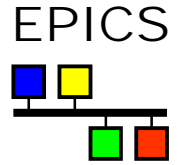
Development Timescales



- ◆ Link Support is being developed for 3.15
- ◆ Other changes will also be included in 3.15
- ◆ Rough timescales may be predicted thus:
 - ◆ 3.11 was released in 1993
 - ◆ 3.12 was released in 1995, 2 years after 3.11
 - ◆ 3.13 was released in 1998, 3 years after 3.12
 - ◆ 3.14 will probably be released in 2002, 4 years after 3.13
 - ⇒ 3.15 should be released in 2007, 5 years after 3.14
- ◆ However graphical methods may be more accurate...

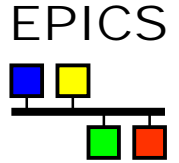


EPICS Release Dates





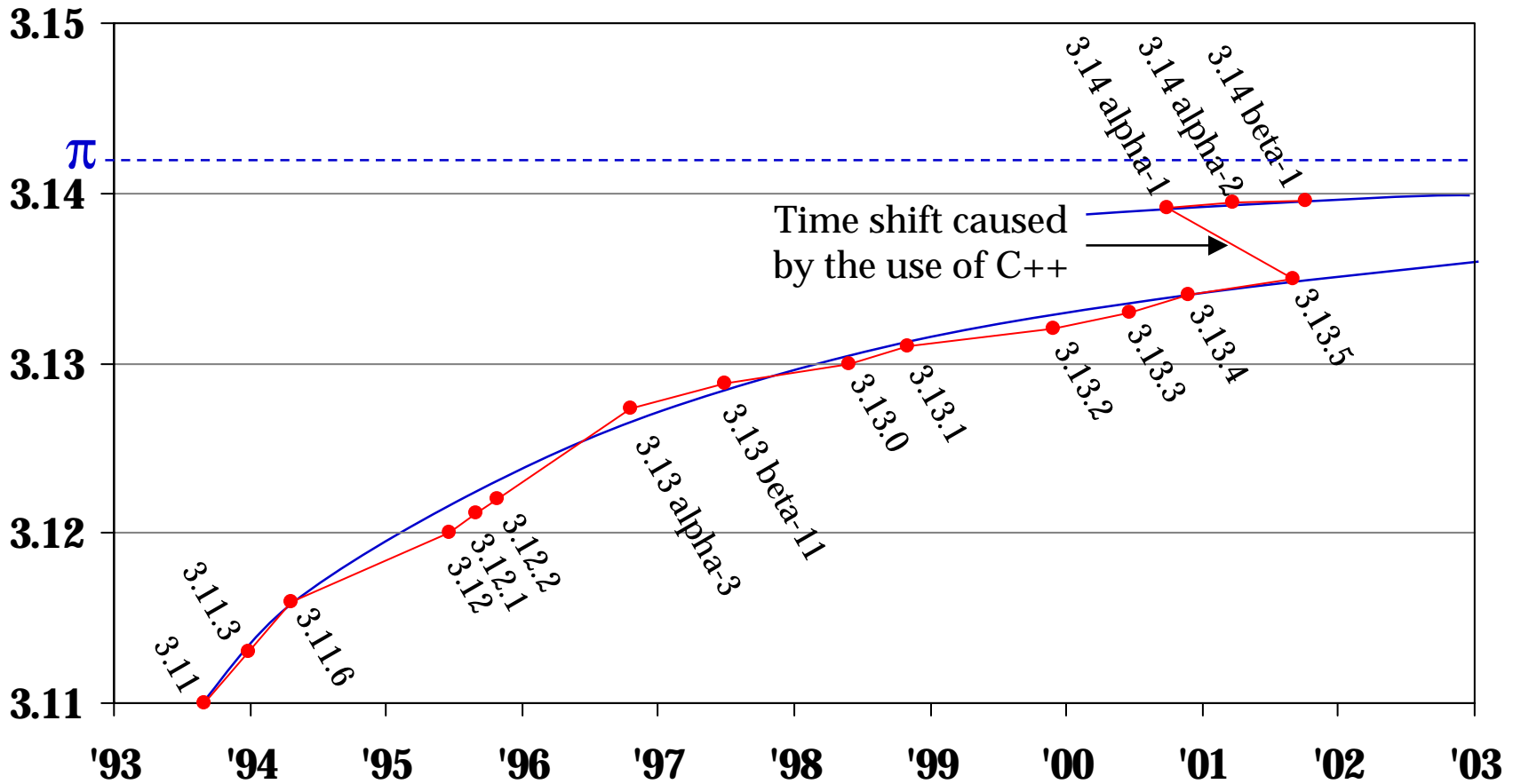
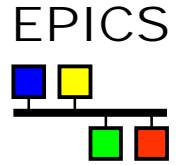
Conclusions



- ◆ By inspection from the graph, it is clear that introducing C++ has merely shifted the curve along its time axis
 - ◆ The slope of the 3.14 releases can be matched to the curve
 - ◆ This indicates 3.14 is about 5 years early

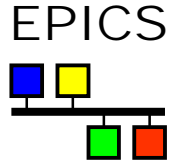


EPICS Release Dates





Conclusions



- ◆ By inspection from the graph, it is clear that introducing C++ has merely shifted the curve along its time axis
 - ◆ The slope of the 3.14 releases can be matched to the curve
 - ◆ This indicates 3.14 is about 5 years early
- ◆ EPICS release numbers are asymptotic and tend towards $\pi \approx 3.1415926535897932384626433832795028841971693994$
- ◆ All work targeted for 3.15 is futile