

**NAME**

**dtrace\_io** - a DTrace provider for tracing events related to disk I/O

**SYNOPSIS**

```
io:::start(struct bio *, struct devstat *);
```

```
io:::done(struct bio *, struct devstat *);
```

**DESCRIPTION**

The **io** provider allows the tracing of disk I/O events. The **io:::start()** probe fires when a I/O request is about to be sent to the backing driver of a disk(9) object. This occurs after all GEOM(4) transformations have been performed on the request. The **io:::done()** probe fires when a I/O request is completed. Both probes take a *struct bio \** representing the I/O request as their first argument. The second argument is a *struct devstat \** for the underlying disk(9) object.

**ARGUMENTS**

The fields of *struct bio* are described in the *g\_bio(9)* manual page, and the fields of *struct devstat* are described in the *devstat(9)* manual page. Translators for the *bufinfo\_t* and *devinfo\_t* D types are defined in */usr/lib/dtrace/io.d*.

**FILES**

*/usr/lib/dtrace/io.d* DTrace type and translator definitions for the **io** provider.

**EXAMPLES**

The following script shows a per-process breakdown of total I/O by disk device:

```
#pragma D option quiet

io:::start
{
    @[args[1]->device_name, execname, pid] = sum(args[0]->bio_bcount);
}

END
{
    printf("%10s %20s %10s %15s\n", "DEVICE", "APP", "PID", "BYTES");
    printa("%10s %20s %10d %15@d\n", @);
}
```

**COMPATIBILITY**

This provider is not compatible with the **io** provider found in Solaris, as its probes use native FreeBSD argument types.

**SEE ALSO**

dtrace(1), devstat(9), SDT(9)

**HISTORY**

The **io** provider first appeared in FreeBSD 9.2 and 10.0.

**AUTHORS**

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**BUGS**

The **io:::wait-start()** and **io:::wait-done()** probes are not currently implemented on FreeBSD.