

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.