The C++ Exception Class

This class is at the root of the derivation tree for Ice exceptions and encapsulates functionality that is common to all `Ice` and `IceUtil` exceptions:

C++

```
class Exception : public std::exception {
public:
    Exception();
    Exception(const char* file, int line);
    virtual ~Exception() throw();

    virtual std::string ice_name() const;
    virtual void ice_print(std::ostream&) const;
    virtual const char* what() const throw();
    virtual Exception* ice_clone() const;
    virtual void ice_throw() const;
    const char* ice_file() const;
    int ice_line() const;
};
```

The second constructor stores a file name and line number in the exception that are returned by the `ice_file` and `ice_line` member functions, respectively. This allows you to identify the source of an exception by passing the `__FILE__` and `__LINE__` preprocessor macros to the constructor.

The `what` member function is a synonym for `ice_print`. The default implementation of `ice_print` prints the file name, line number, and the name of the exception.

The remaining member functions are described in the C++ Mapping for Exceptions.

See Also

- C++ Mapping for Exceptions