Raising Exceptions in Java

To throw an exception from an operation implementation, you simply instantiate the exception, initialize it, and throw it. For example:

```
Java

// ...

public void
write(String[] text, Ice.Current current)
    throws GenericError
{
    try
    {
        // Try to write file contents here...
    }
    catch(Exception ex)
    {
        throw new GenericError("Exception during write operation", ex);
    }
}
```

Note that, for this example, we have supplied the optional second parameter to the GenericError constructor. This parameter sets the inner exception and preserves the original cause of the error for later diagnosis.

If you throw an arbitrary Java run-time exception (such as a ClassCastException), the Ice run time catches the exception and then returns an Unk nownException to the client. Similarly, if you throw an "impossible" user exception (a user exception that is not listed in the exception specification of the operation), the client receives an UnknownUserException.

If you throw an Ice run-time exception, such as MemoryLimitException, the client receives an UnknownLocalException. For that reason, you should never throw system exceptions from operation implementations. If you do, all the client will see is an UnknownLocalException, which does not tell the client anything useful.



Three run-time exceptions are treated specially and not changed to <code>UnknownLocalException</code> when returned to the client: <code>ObjectNotExistException</code>, <code>OperationNotExistException</code>, and <code>FacetNotExistException</code>.

See Also

- Run-Time Exceptions
- Java Mapping for Exceptions
- Server-Side Java Mapping for Interfaces
- Parameter Passing in Java
- Tie Classes in Java