

G++ 2.91.57, cygnus\cygwin-b20\include\g++\stl_tempbuf.h 完整列表

```
/*
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 */

/* NOTE: This is an internal header file, included by other STL headers.
 * You should not attempt to use it directly.
 */

#ifndef __SGI_STL_INTERNAL_TEMPBUF_H
#define __SGI_STL_INTERNAL_TEMPBUF_H

__STL_BEGIN_NAMESPACE

template <class T>
pair<T*, ptrdiff_t> get\_temporary\_buffer(ptrdiff_t len, T*) {
    if (len > ptrdiff_t(INT_MAX / sizeof(T)))
        len = INT_MAX / sizeof(T);

    while (len > 0) {
        T* tmp = (T*) malloc((size_t)len * sizeof(T));
        if (tmp != 0)
            return pair<T*, ptrdiff_t>(tmp, len);
        len /= 2;
    }
}
```

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    return pair<T*, ptrdiff_t>((T*)0, 0);
}

template <class T>
void return_temporary_buffer(T* p) {
    free(p);
}

template <class ForwardIterator,
          class T
#ifdef __STL_CLASS_PARTIAL_SPECIALIZATION
          = iterator_traits<ForwardIterator>::value_type
#endif /* __STL_CLASS_PARTIAL_SPECIALIZATION */
>
class temporary_buffer {
private:
    ptrdiff_t original_len;
    ptrdiff_t len;
    T* buffer;

    void allocate_buffer() {
        original_len = len;
        buffer = 0;

        if (len > (ptrdiff_t)(INT_MAX / sizeof(T)))
            len = INT_MAX / sizeof(T);

        while (len > 0) {
            buffer = (T*) malloc(len * sizeof(T));
            if (buffer)
                break;
            len /= 2;
        }
    }

    void initialize_buffer(const T&, __true_type) {}
    void initialize_buffer(const T& val, __false_type) {
        uninitialized_fill_n(buffer, len, val);
    }

public:
    ptrdiff_t size() const { return len; }
    ptrdiff_t requested_size() const { return original_len; }
    T* begin() { return buffer; }
    T* end() { return buffer + len; }

    temporary_buffer(ForwardIterator first, ForwardIterator last) {
        __STL_TRY {

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        len = 0;
        distance(first, last, len);
        allocate_buffer();
        if (len > 0)
            initialize_buffer(*first,
                              typename
            __type_traits<T>::has_trivial_default_constructor());
    }
    __STL_UNWIND(free(buffer); buffer = 0; len = 0);
}

~temporary_buffer() {
    destroy(buffer, buffer + len);
    free(buffer);
}

private:
    temporary_buffer(const temporary_buffer&) {}
    void operator=(const temporary_buffer&) {}
};

__STL_END_NAMESPACE

#endif /* __SGI_STL_INTERNAL_TEMPBUF_H */

// Local Variables:
// mode:C++
// End:
```