



## ***Rocky Enterprise Linux 9.2 Manual Pages on command 'XtDispatchEventToWidget.3'***

**C:~>man XtDispatchEventToWidget.3**

XtInsertEventHandler(3)      XT FUNCTIONS      XtInsertEventHandler(3)

### NAME

XtInsertEventHandler, XtRemoveEventHandler, XtRegisterExtensionSelector,  
XtSetEventDispatcher, XtDispatchEventToWidget - extension event handling

### SYNTAX

```
void XtInsertEventHandler(Widget widget, int event_type, XtPointer select_data,  
    XtEventHandler proc, XtPointer client_data, XtListPosition position);  
void XtRemoveEventHandler(Widget widget, int event_type, XtPointer select_data,  
    XtEventHandler proc, XtPointer client_data);  
void XtRegisterExtensionSelector(Display* display, int min_event_type, int  
    max_event_type, XtExtensionSelectProc proc, XtPointer client_data);  
XtEventDispatchProc XtSetEventDispatcher(Widget widget, int event_type, XtEventDis?  
    patchProc proc);  
Boolean XtDispatchEventToWidget(Widget widget, XEvent* event);
```

### ARGUMENTS

**widget**    Specifies the widget for this event handler. Must be of class Core or  
any subclass thereof.

**event\_type**  
Specifies the event type.

**select\_data**  
Specifies data used to select or deselect events from the server.

**proc**      Specifies the proc.

client\_data

Specifies additional data to be passed to the event handler.

position Specifies when the event handler is to be called relative to other previously registered handlers.

display Specifies the display.

min\_event\_type, max\_event\_type

Specifies the range of event types for this extension.

event Specifies a pointer to the event to be dispatched.

## DESCRIPTION

The XtInsertEventTypeHandler function registers a procedure with the dispatch mechanism that is to be called when an event that matches the specified event\_type is dispatched to the specified widget.

If event\_type is one of the core X protocol events then select\_data must be a pointer to a value of type EventMask, indicating the event mask to be used to select for the desired event. This event mask will be included in the value returned by XtBuildEventMask. If the widget is realized XtInsertEventTypeHandler calls XSelectInput if necessary. Specifying NULL for select\_data is equivalent to specifying a pointer to an event mask containing 0. This is similar to the XtInsertRawEventHandler function.

If event\_type specifies an extension event type then the semantics of the data pointed to by select\_data are defined by the extension selector registered for the specified event type.

In either case the Intrinsics are not required to copy the data pointed to by select\_data, so the caller must ensure that it remains valid as long as the event handler remains registered with this value of select\_data.

The position argument allows the client to control the order of the invocation of event handlers registered for the same event type. If the client does not care about the order, it should normally specify XtListTail, which registers this event handler after any previously registered handlers for this event type.

The XtRemoveEventTypeHandler function unregisters an even handler registered with XtInsertEventTypeHandler for the specified event type. The request is ignored if client\_data does not match the value given with the handler was registered.

If event\_type specifies one of the core X protocol events, select\_data must be a

pointer to a value of type `EventMask`, indicating the mask to be used to deselect for the appropriate event. If the widget is realized, `XtRemoveEventTypeHandler` calls `XSelectInput` if necessary. Specifying `NULL` for `select_data` is equivalent to specifying a pointer to an event mask containing 0. This is similar to the `XtRemoveRawEventHandler` function.

If `event_type` specifies an extension event type then the semantics of the data pointed to by `select_data` are defined by the extension selector registered for the specified event type.

The `XtRegisterExtensionSelector` function registers a procedure to arrange for the delivery of extension events to widgets.

If `min_event_type` and `max_event_type` match the parameters to a previous call to `XtRegisterExtensionSelector` for the same display, the `proc` and `client_data` replace the previously registered values. If the range specified by `min_event_type` and `max_event_type` overlaps the range of the parameters to a previous call for the same display in any other way, an error results.

The `XtSetEventDispatcher` function registers the event dispatcher procedure specified by `proc` for events with the type `event_type`. The previously registered dispatcher (or the default dispatcher if there was no previously registered dispatcher) is returned. If `proc` is `NULL`, the default procedure is restored for the specified type.

In the future, when `XtDispatchEvent` is called with an event of `event_type`, the specified `proc` (or the default dispatcher) will be invoked to determine a widget to which to dispatch the event.

The `XtDispatchEventToWidget` function scans the list of registered event handlers for the specified widget and calls each handler that has been registered for the specified event type, subject to the `continue_to_dispatch` value returned by each handler. The Intrinsics behave as if event handlers were registered at the head of the list for `Expose`, `NoExpose`, `GraphicsExpose`, and `VisibilityNotify` events to invoke the widget's expose procedure according to the exposure compression rules and to update the widget's visible field if `visible_interest` is `True`. These internal event handlers never set `continue_to_dispatch` to `False`.

`XtDispatchEventToWidget` returns `True` if any event handler was called and `False` otherwise.

SEE ALSO

XtGetKeyboardFocusWidget(3)

X Toolkit Intrinsic - C Language Interface

Xlib - C Language X Interface

X Version 11

libXt 1.1.5

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