

Request Object

The MS Agent processes some methods (such as **Load**, **Play**, **Speak**, and **Think**, asynchronously. Each method for the agent character is placed in the specified agent character's queue. The next method in the queue is executed after the previous method finishes. This enables MS Agent Control to play the animation on a separate thread, so the Toolbook application code can continue while the MS Agent animations play. The request object allows you to track the status of these asynchronous methods by assigning a request.

The following agent character methods can be used with the request object: **GestureAt**, **Hide**, **Interrupt**, **Load**, **Moveto**, **Play**, **Show**, **Speak**, **Wait**.

Using **Request** with **MoveTo**:

```
-The two agent characters move in coordination
AgentGenieRequest = extMoveTo(100,100) of\
  AgentGenie
AgentMerlinRequest = extMoveTo(200,100) of\
  AgentMerlin
get extWait(AgentGenieRequest) of AgentMerlin
get extWait(AgentMerlinRequest) of AgentGenie
```

Using **Request** with **Play**:

```
AgentGenieRequest = extPlay("Greet") of
AgentGenie
-AgentMerlin queue waits until animation "Greet" of
-- AgentGenie is completed
get extWait(AgentGenieRequest) of AgentMerlin
-AgentMerlin queue continues...
```

Using **Request** with **Speak**:

```
AgentGenieRequest = extSpeak("Greetings") of\
  AgentGenie
-AgentMerlin waits to perform "Greet" animation
-- until AgentGenie completes saying "Greetings"
get extWait(AgentGenieRequest) of AgentMerlin
get extPlay("Greet") of AgentMerlin
```

Description	Property
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Description

Returns a description of an error returned with the **Request** object fails.

Syntax

extDescription of *AgentCharacterRequest*

Returns

String value that corresponds to the error number.

Notes

If the string doesn't exist for the error, **Description** will return "Application-defined or object-defined error."

The error is returned as a number by the **Number** property of the **Request** object. You would have to consult the MS Agent Error Codes for the meaning of the values returned by the **Number** property. It is easier to use **Description** directly for the name of the error.

```

To get the description of the error returned for a
failed request;
to handle buttonClick
system AgentControlSystem, AgentGenie
--If Genie is hidden, the following code will
-- generate "The specified method failed because
-- the character is hidden" message
AgentGenieRequest = extSpeak("Does this code cause an\
error?") of AgentGenie
if extStatus of AgentGenieRequest = 1 --The
-- Request failed.
Request extDescription of AgentGenieRequest
end if
end ButtonClick

```

Status	Property
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Description

Returns the status of the **Request** object.

Syntax

`extStatus of AgentCharacterRequest`

Returns

Integer corresponding to status of request:
0 Request successfully completed.
1 Request failed.

- 2 Request pending (in the queue, but not complete).
- 3 Request interrupted.
- 4 Request in progress.

Notes

Use the **Status** property when you want to other things to wait, or be dependent upon the completion of a **Request**.

```

To keep the book from exiting until the agent
character (Genie) finishes hiding:
AgentGenieRequest = extPlay("Hide") of\
AgentGenie
while (extStatus of AgentGenieRequest) is in "24"
mmYield
end while

```

To trap if an error occurred with the **Request**:

```

AgentGenieRequest = extSpeak("Does this code cause\
an error?") of AgentGenie
if extStatus of AgentGenieRequest = 1
--then code to handle the error
See Request object Description property for
further information on handling a failed request.

```