

# **PCHECK - Parameter Checking for Object Calling Statements**

This Natural profile parameter is used to control Natural's compiler.

<b>Possible settings</b>	ON	<p>The compiler checks the number, format, length and array index bounds of the parameters that are specified in an object calling statement, such as CALLNAT, PERFORM, INPUT USING MAP, PROCESS PAGE USING, help routine calls. Also, the OPTIONAL feature of the DEFINE DATA PARAMETER statement is considered in the parameter check.</p> <p>The parameter check is based on a comparison of the parameters of the calling statement with the DEFINE DATA PARAMETER definitions for the object to be called.</p> <p>It requires that</p> <ul style="list-style-type: none"> <li>● the name of the subprogram to be invoked is defined as an alphanumeric constant (not as an alphanumeric variable),</li> <li>● the subprogram to be invoked is available as a cataloged object.</li> </ul> <p>Otherwise, PCHECK=ON will have no effect.</p> <p><b>Problems in Using the CATAL Command with PCHECK=ON</b></p> <p>When a CATAL command is used in conjunction with PCHECK=ON, you should consider the following:</p> <p>If a CATAL process is invoked, the order in which the programming objects are compiled depends primarily on the type of the object and secondarily on the alphabetical name of the object. The object type sequence used is: DDMs, GDAs, LDAs, PDAs, classes, maps, external subroutines, subprograms, functions, adapters, help routines, programs. Within objects of the same type, the alphabetical order of the name determines the sequence in which they are cataloged.</p> <p>As mentioned above, the parameters of the object calling statement are checked against the compiled form of the called object. If the calling object (the one which is being compiled and includes the object calling statement) is cataloged before the invoked object, the PCHECK result may be wrong if the parameters in the object calling statement and in the called object were changed. In this case, the new object image of the called object has not yet been produced by the CATAL command.</p> <p>This causes the <i>new</i> parameter layout in the object calling statement to be compared with the <i>old</i> parameter layout of the DEFINE DATA PARAMETER statement of the called subprogram.</p> <p>Solution:</p> <ul style="list-style-type: none"> <li>● Set compiler option PCHECK to OFF.</li> <li>● Perform a general compile with CATAL on the complete library, or if just one or a few objects were changed, perform a separate compile on these objects.</li> <li>● Set compiler option PCHECK=ON.</li> <li>● On the complete library, perform a general compile with the function CHECK of system command CATAL enabled.</li> </ul>
	OFF	No parameter check is performed.
<b>Default setting</b>	OFF	

<b>Dynamic specification</b>	yes		
<b>Specification within session</b>	yes	Applicable Statements:	OPTIONS
		Applicable Command:	PCHECK option of COMPOPT