

Table 1: Generics.Collections compatibility

Delphi	FreePascal		
	Impl.	Parent	Replacement
TArray			TArrayHelper<T> <sup>1</sup>
TCollectionNotification	✓		
TCollectionNotifyEvent	✓		
TEnumerator<T>	✓	✓	
TEnumerable<T>	✓	✓	
TList<T>	✓	TCustomList<T>	
TThreadList<T>			
TQueue<T>	✓	TCustomList<T>	
TStack<T>	✓	TCustomList<T>	
TPair<TKey, TValue>	✓		
TDictionary<TKey, TValue>	✓	TOpenAddressingLP<TKey, TValue>	
TObjectList<T: class>	✓	✓	
TObjectQueue<T: class>	✓	✓	
TObjectStack<T: class>	✓	✓	
TDictionaryOwnships	✓		
TObjectDictionary<TKey, TValue>	✓	TObjectOpenAddressingLP<TKey, TValue>	
TThreadedQueue<T>			
PObject	✓		
InCircularRange	✓		

<sup>1</sup> TArrayHelper<T> will be withdrawn when the FPC syntax will make parameterized methods available.

Table 2: `Generics.Defaults` compatibility

Delphi	FreePascal		
	Impl.	Parent	Replacement
<code>IComparer&lt;T&gt;</code>	✓	✓	
<code>IEqualityComparer&lt;T&gt;</code>	✓	✓	
<code>TComparison&lt;T&gt;</code> <sup>2</sup>			<code>TOnComparison&lt;T&gt;</code> <code>TComparisonFunc&lt;T&gt;</code>
<code>TComparer&lt;T&gt;</code>	✓	✓	
<code>TEqualityComparison&lt;T&gt;</code> <sup>2</sup>			<code>TOnEqualityComparison&lt;T&gt;</code> <code>TEqualityComparisonFunc&lt;T&gt;</code>
<code>THasher&lt;T&gt;</code> <sup>2</sup>			<code>TOnHasher&lt;T&gt;</code> <code>THasherFunc&lt;T&gt;</code>
<code>TEqualityComparer&lt;T&gt;</code>	✓	✓	
<code>TSingletonImplementation</code>	✓	<code>TRawInterface</code>	
<code>TDelegatedEqualityComparer&lt;T&gt;</code>			<code>TDelegatedEqualityComparerEvents&lt;T&gt;</code> <code>TDelegatedEqualityComparerFunc&lt;T&gt;</code>
<code>TDelegatedComparer&lt;T&gt;</code>			<code>TDelegatedComparerEvents&lt;T&gt;</code> <code>TDelegatedComparerFunc&lt;T&gt;</code>
<code>TCustomComparer&lt;T&gt;</code>	✓	✓	
<code>TStringComparer</code>	✓	<code>TGStringComparer&lt;string&gt;</code> <sup>3</sup>	
<code>TIStringComparer</code>	✓	<code>TG TStringComparer&lt;string&gt;</code> <sup>3</sup>	
<code>TOrdinalIStringComparer</code>	✓	<code>TGOrdinalIStringComparer&lt;string&gt;</code> <sup>3</sup>	
<code>BobJenkinsHash</code>	✓		
<code>BinaryCompare</code>	✓		
<code>TDefaultGenericInterface</code>	✓		
<code>LookupVtableInfo</code>	✓		

<sup>2</sup> FreePascal does not run anonymous methods. As a replacement, there has been provided an operation of methods and ordinary functions, which can substitute the new structures until their introduction.

<sup>3</sup> The name of the class is going to be changed. The prefix TG will be replaced with a standard T. A temporary name with the TG prefix is caused by an error:

<http://bugs.freepascal.org/view.php?id=26030>.

Table 3: Legend for table 1 and 2

Color	Meaning
Dark Gray	No implementation or very incompatible.
Light Gray	Some of the elements may be incompatible (usually a parent class). In such cases, there is usually a substitute/alternative class which is more compatible with the original.
White	Full or large compatibility on the level of the classes public interface.

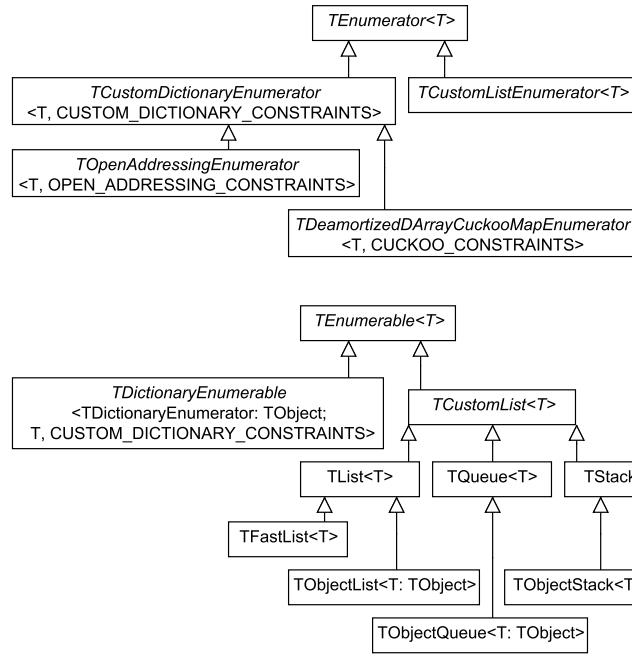


Figure 1: Collections and enumeration

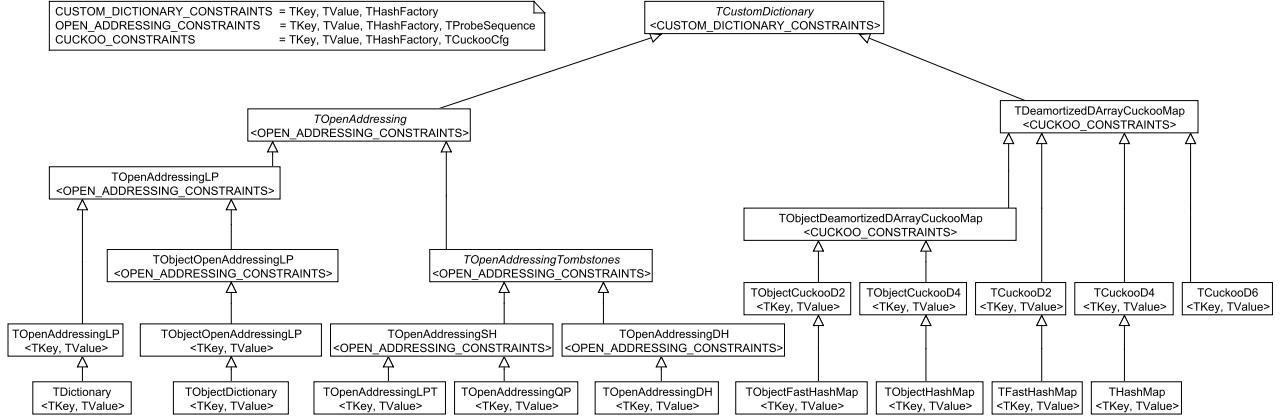


Figure 2: Dictionaries

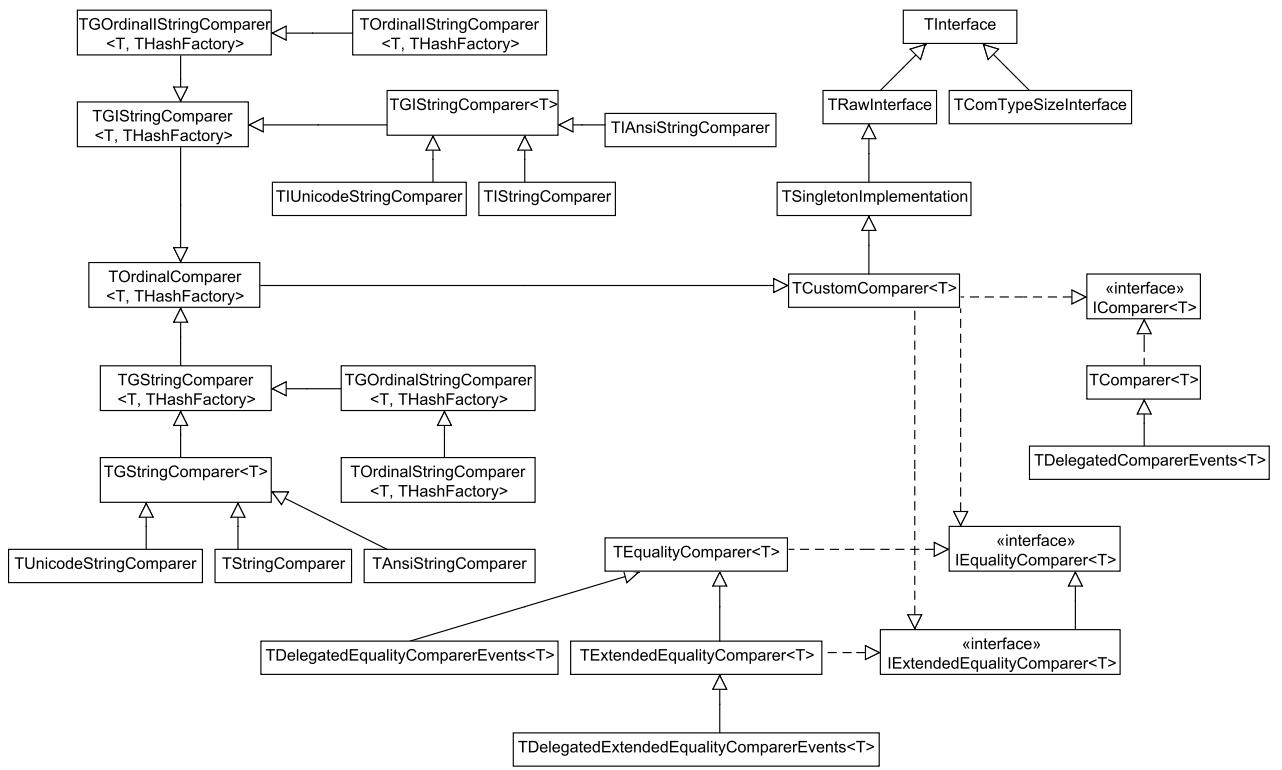


Figure 3: Singletons and comparators

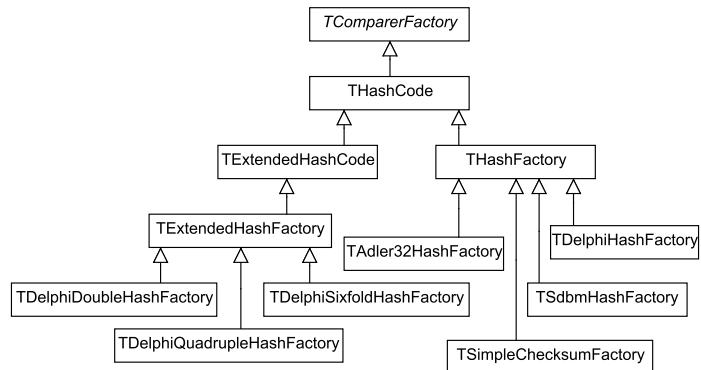


Figure 4: Hash factory