Managed Contracts for Dev10

# Features

## Move contract library to mscorlib and make it public

Need a final API review of the library, e.g., is Requires always defined or not?

## Define behavior of contract methods

### Requires in retail build

This includes any variants that are defined in the retail build, i.e., without the rewriter.

### All methods in rewritten builds

## Publish tools and reference assemblies in SDK

### Tools

#### Rewriter

The rewriter needs to be able to take a customizable definition for how the rewritten contracts should behave.

#### Reference assembly generator

It should be a superset of the existing asmmeta, persisting both the contracts as IL and the strings of the conditions extracted from the source.

#### Static checker

Need to define exactly which properties Clousot will check.

#### Documentation Generator for contracts

This needs to be part of the existing tool that produces MSDN documentation.

### VS Plugin for running static checker

Produce a variant of Daan’s component that adds a pane to the project properties of C# projects (what about other languages?) for doing static checking.

### Reference Assemblies

Extract the contracts from the BCL sources, add in the existing Spec# out-of-band contracts, add more manually? What about contracts inferred by Clousot?

We need to make it possible for users to augment reference assemblies with more contracts.

### Produce documentation for all tools

### Productize all tools

What else needs to be done besides the sub-headings listed below?

#### Localization

#### Checkpoint express

## Get BCL developers to write postconditions and invariants

An alternative is to use MSR’s current OOBs and whatever Clousot is able to infer.

# Schedule

## Internal release (based on CCI1): end of May

<a list of the features that will be included>

## Internal release (based on CCI2): end of June

<a list of the features that will be included>

## Feature complete internal release: end of August