

GE Discovery PT

Revision History

Date / Version	Author	Comments
4/11/2012	Steve Moore	Initial release

Introduction

This document lists private elements for GE Discovery PT systems. A separate table is maintained for each collection of private elements indexed by the Private Creator ID. Each table contains a column for each of the software versions listed below. The intersection of a row (private element) and a column (software version) is a cell with a symbol indicating if that private element is produced by that software version.

- *: Element is listed in the document
- X1: Element is listed with a note: No longer supported

If the cell is empty, the DICOM conformance statement for that software version does not mention that private element.

All data were determined by reading DICOM conformance statements.

Scanner/Software Versions

Link Name / GE website	Model	Software Version	Document
Discovery ST 07MWHL36.4	Discovery ST	07MWHL36.4	5257407-100 Rev C
Discovery ST petct_vct_hp.80A M4	Discovery ST	petct_vct_hp.80A M4	5161694-100 Rev. 2
Discovery STE dm09_hl2sp1.23_5257407- 100r3	Discovery STE	dm09_hl2sp1.23	5257407-100r3

GEMS_IDEN_01

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4	Discovery STE dm09_hl2sp1.23_5257407-100r3
Description	Tag	VR	VM			
GEHC Private Creator ID	0x00090010	LO	1	*	*	
Full fidelity	0x00091001	LO	1	*	*	
Suite id	0x00091002	SH	1	*	*	
Product ID	0x00091004	SH	1	*	*	
Image Actual Date	0x00091027	SL	1	*	*	
Equipment UID	0x000910e3	UI	1	*	*	

GEMS_ACQU_01

				Discovery ST 07MWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00190010	LO	1	*	*
Number of cells I in Detector	0x00191002	SL	1	*	*
Cell number at Theta	0x00191003	DS	1	*	*
Cell spacing	0x00191004	DS	1	*	*
Horiz. Frame of ref.	0x0019100f	DS	1	*	*
Series Contrast	0x00191011	SS	1	*	*
First scan ras	0x00191018	LO	1	*	*
Last scan ras	0x0019101a	LO	1	*	*
Table speed	0x00191023	DS	1	*	*
Mid scan time	0x00191024	DS	1	*	*
Mid scan flag	0x00191025	SS	1	*	*
Degrees of azimuth	0x00191026	SS	1	*	*
Number of triggers	0x0019102c	SL	1	*	*
Angle of first view	0x0019102e	DS	1	*	*
Trigger frequency	0x0019102f	DS	1	*	*
Scan FOV type	0x00191039	SS	1	*	*
Segment number	0x00191042	SS	1	*	*
Total segments requested	0x00191043	SS	1	*	*
View compression factor	0x00191047	SS	1	*	*
Recon post proc. Flag	0x00191052	SS	1	*	*
Dependent on #views processed	0x0019106a	SS	1	*	*

GEMS_REL_A_01

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00210010	LO	1	*	*
Series from which Prescribed	0x00211003	SS	1	*	*
Series Prescribed From	0x00211035	SS	1	*	*
Image Prescribed From	0x00211036	SS	1	*	*
Biopsy position	0x00211091	SS	1	*	*
Biopsy T location	0x00211092	FL	1	*	*
Biopsy ref location	0x00211093	FL	1	*	*

GEMS_STDY_01

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00230010	LO	1	*	*
Start time(secs) in first axial	0x00231070	FD	1	*	*

GEMS_IMAG_01

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A
GEHC Private Creator ID	0x00270010	LO	1	*	*
Scout Type	0x00271010	SS	1	*	*
Vma mamp	0x0027101c	SL	1	*	*
Vma mod	0x0027101e	SL	1	*	*
Smart scan ON/OFF flag	0x00271020	SS	1	*	*
Plane Type	0x00271035	SS	1	*	*
Center R coord of plane image	0x00271042	FL	1	*	*
Center A coord of plane image	0x00271043	FL	1	*	*
Center S coord of plane image	0x00271044	FL	1	*	*
Normal R coord	0x00271045	FL	1	*	*
Normal A coord	0x00271046	FL	1	*	*
Normal S coord	0x00271047	FL	1	*	*
Table start location	0x00271050	FL	1	*	*
Table end location	0x00271051	FL	1	*	*

GEMS_PARM_01

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00430010	LO	1	*	*
Window value	0x00431010	US	1	*	*
X-ray chain	0x00431012	SS	3	*	*
Number of overranges	0x00431016	SS	5	*	*
Delta start time	0x0043101e	DS	1	*	*
Max overranges in a view	0x0043101f	SL	1	*	*
Corrected after glow terms	0x00431021	SS	1	*	*
Reference channels	0x00431025	SS	6	*	*
No views ref chans blocked	0x00431026	US	6	*	*
Scan pitch ratio	0x00431027	SH	1	*	*
Unique image iden	0x00431028	OB	1	*	*
Private Scan Options	0x0043102b	SS	4	*	*
RA cord of target recon center	0x00431031	DS	2	*	*
Trigger on position	0x00431040	FL	4	*	*
Degree of rotation	0x00431041	FL	4	*	*
DAS trigger source	0x00431042	SL	4	*	*
DAS fpa gain	0x00431043	SL	4	*	*
DAS output source	0x00431044	SL	4	*	*
DAS ad input	0x00431045	SL	4	*	*
DAS cal mode	0x00431046	SL	4	*	*
Start scan to X-ray on delay	0x0043104d	FL	4	*	*
Duration of X-ray on	0x0043104e	FL	4	*	*
Recon filter	0x00431064	LO	1	*	*

GEMS-HELIOS_01

				Discovery ST 07MWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00450010	LO	1	*	*
Number of Macro Rows in Detector	0x00451001	SS	1	*	*
Macro width at ISO Center	0x00451002	FL	1	*	*
DAS type	0x00451003	SS	1	*	*
DAS gain	0x00451004	SS	1	*	*
DAS Temperature	0x00451005	SS	1	*	*
Table Direction	0x00451006	CS	1	*	*
Z smoothing Factor	0x00451007	FL	1	*	*
View Weighting Mode	0x00451008	SS	1	*	*
Sigma Row number	0x00451009	SS	1	*	*
Minimum DAS value	0x0045100a	FL	1	*	*
Maximum Offset Value	0x0045100b	FL	1	*	*
Number of Views shifted	0x0045100c	SS	1	*	*
Z tracking Flag	0x0045100d	SS	1	*	*
Mean Z error	0x0045100e	FL	1	*	*
Z tracking Error	0x0045100f	FL	1	*	*
Start View 2A	0x00451010	SS	1	*	*
Number of Views 2A	0x00451011	SS	1	*	*
Start View 1A	0x00451012	SS	1	*	*
Sigma Mode	0x00451013	SS	1	*	*
Number of Views 1A	0x00451014	SS	1	*	*
Start View 2B	0x00451015	SS	1	*	*
Number Views 2B	0x00451016	SS	1	*	*
Start View 1B	0x00451017	SS	1	*	*
Number of Views 1B	0x00451018	SS	1	*	*
Itebone Flag	0x00451021	SS	1	*	*
Peristaltic Flag	0x00451022	SS	1	*	*

CardiacReconAlgorithm	0x00451030	CS	1	*	*
AvgHeartRateForImage	0x00451031	CS	1	*	*
TemporalResolution	0x00451032	FL	1	*	*
PctRpeakDelay	0x00451033	CS	1	*	*
ActualPctRpeakDelay	0x00451034	CS	1	*	
EkgFullMaStartPhase	0x00451036	CS	1	*	*
EkgFullMaEndPhase	0x00451037	CS	1	*	*
EkgModulationMaxMa	0x00451038	CS	1	*	*
EkgModulationMinMa	0x00451039	CS	1	*	*
Noise ReductionImageFilterDesc	0x0045103b	LO	1	*	*

GEMS_CT_CARDIAC_001

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4
GEHC Private Creator ID	0x00490010	LO	1	*	*
CT Cardiac Sequence	0x00491001	SQ	1	*	*
HeartRateAtConfirm	0x00491002	CS	1	*	*
AvgHeartRatePriorToConfirm	0x00491003	FL	1	*	*
MinHeartRatePriorToConfirm	0x00491004	CS	1	*	*
MaxHeartRatePriorToConfirm	0x00491005	CS	1	*	*
StdDevHeartRate PriorToConfirm	0x00491006	FL	1	*	*
NumHeartRateSamples PriorToConfirm	0x00491007	US	1	*	*
AutoHeartRateDetectPredict	0x00491008	CS	1	*	*
SystemOptimizedHeartRate	0x00491009	CS	1	*	*
EkgMonitorType	0x0049100a	ST	1	*	*
NumReconSectors	0x0049100b	CS	1	*	*
RpeakTimeStamps	0x0049100c	FL	256	*	*

GEMS_PETD_01

				Discovery ST 07MWWHL36.4	Discovery ST petct_vct_hp.80A M4	Discovery STE dm09_hl2sp1.23_5257407-100r3
Description	Tag	VR	VM			
GEHC Private Creator ID	0x00090010	LO	1	*	*	*
GE Discovery PET Implementation Version Name	0x00091001	LO	2	*	*	*
PET patient_id	0x00091002	LO	1	*	*	*
PET compatible_version	0x00091003	SH	1	*	*	*
PET patient_datetime	0x00091005	DT	1	*	*	*
PET type	0x00091006	SL	1	*	*	*
PET exam_id	0x00091007	UI	1	*	*	*
PET compatible_version	0x00091008	SH	1	*	*	*
PET software_version	0x00091009	SH	1	*	*	*
PET scan_id	0x0009100a	UI	1	*	*	*
PET compatible_version	0x0009100b	SH	1	*	*	*
PET software_version	0x0009100c	SH	1	*	*	*
PET scan_datetime	0x0009100d	DT	1	*	*	*
PET scan_ready	0x0009100e	DT	1	*	*	*
PET scan_description	0x0009100f	ST	1	*	*	*
PET hospital_name	0x00091010	LO	1	*	*	*
PET scanner_desc	0x00091011	LO	1	*	*	*
PET manufacturer	0x00091012	LO	1	*	*	*
PET for_identifier	0x00091013	UI	1	*	*	*
PET landmark_name	0x00091014	LO	1	*	*	*
PET landmark_abbrev	0x00091015	SH	1	*	*	*

PET patient_position	0x00091016	SL	1	*	*	*
PET scan_perspective	0x00091017	SL	1	*	*	*
PET scan_type	0x00091018	SL	1	*	*	*
PET scan_mode	0x00091019	SL	1	*	*	*
PET start_condition	0x0009101a	SL	1	*	*	*
PET start_cond_data	0x0009101b	SL	1	*	*	*
PET sel_stop_cond	0x0009101c	SL	1	*	*	*
PET sel_stop_cond_data	0x0009101d	SL	1	*	*	*
PET collect_deadtime	0x0009101e	SL	1	*	*	*
PET collect_singles	0x0009101f	SL	1	*	*	*
PET countrate	0x00091020	SL	1	*	*	*
PET countrate_period	0x00091021	SL	1	*	*	*
PET delayed_events	0x00091022	SL	1	*	*	*
PET delayed_bias	0x00091023	SL	1	*	*	*
PET word_size	0x00091024	SL	1	*	*	*
PET axial_acceptance	0x00091025	SL	1	*	*	*
PET axial_angle_3d	0x00091026	SL	1	*	*	*
PET theta_compression	0x00091027	SL	1	*	*	*
PET axial_compression	0x00091028	SL	1	*	*	*
PET gantry_tilt_angle	0x00091029	FL	1	*	*	*
PET collimation	0x0009102a	SL	1	*	*	*
PET scan_fov	0x0009102b	SL	1	*	*	*
PET axial_fov	0x0009102c	SL	1	*	*	*
PET event_separation	0x0009102d	SL	1	*	*	*
PET mask_width	0x0009102e	SL	1	*	*	*
PET binning_mode	0x0009102f	SL	1	*	*	*
PET trig_rej_method	0x00091030	SL	1	*	*	*
PET number_for_reject	0x00091031	SL	1	*	*	*
PET lower_reject_limit	0x00091032	SL	1	*	*	*
PET upper_reject_limit	0x00091033	SL	1	*	*	*
PET triggers_acquired	0x00091034	SL	1	*	*	*
PET triggers_rejected	0x00091035	SL	1	*	*	*
PET tracer_name	0x00091036	LO	1	*	*	*
PET batch_description	0x00091037	LO	1	*	*	*
PET tracer_activity	0x00091038	FL	1	*	*	*
PET meas_datetime	0x00091039	DT	1	*	*	*
PET pre_inj_volume	0x0009103a	FL	1	*	*	*
PET admin_datetime	0x0009103b	DT	1	*	*	*
PET post_inj_activity	0x0009103c	FL	1	*	*	*
PET post_inj_datetime	0x0009103d	DT	1	*	*	*
PET radionuclide_name	0x0009103e	SH	1	*	*	*

PET half_life	0x0009103f	FL	1	*	*	*
PET positron_fraction	0x00091040	FL	1	*	*	*
PET source1_holder	0x00091041	SL	1	*	*	*
PET source1_activity	0x00091042	FL	1	*	*	*
PET source1_meas_dt	0x00091043	DT	1	*	*	*
PET source1_radnuclide	0x00091044	SH	1	*	*	*
PET source1_half_life	0x00091045	FL	1	*	*	*
PET source2_holder	0x00091046	SL	1	*	*	*
PET source2_activity	0x00091047	FL	1	*	*	*
PET source2_meas_dt	0x00091048	DT	1	*	*	*
PET source2_radnuclide	0x00091049	SH	1	*	*	*
PET source2_half_life	0x0009104a	FL	1	*	*	*
PET source_speed	0x0009104b	SL	1	*	*	*
PET source_location	0x0009104c	FL	1	*	*	*
PET emission_present	0x0009104d	SL	1	*	*	*
PET lower_axial_acc	0x0009104e	SL	1	*	*	*
PET upper_axial_acc	0x0009104f	SL	1	*	*	*
PET lower_coinc_limit	0x00091050	SL	1	*	*	*
PET upper_coinc_limit	0x00091051	SL	1	*	*	*
PET coinc_delay_offset	0x00091052	SL	1	*	*	*
PET coinc_output_mode	0x00091053	SL	1	*	*	*
PET upper_energy_limit	0x00091054	SL	1	*	*	*
PET lower_energy_limit	0x00091055	SL	1	*	*	*
PET normal_cal_id	0x00091056	UI	1	*	*	*
PET normal_2d_cal_id	0x00091057	UI	1	*	*	*
PET blank_cal_id	0x00091058	UI	1	*	*	*
PET wc_cal_id	0x00091059	UI	1	*	*	*
PET derived	0x0009105a	SL	1	*	*	*
PET contrast_agent	0x0009105b	LO	1	*	*	*
PET vqc_x_axis_trans	0x000910cb	FL	1	*	*	*
PET vqc_x_axis_tilt	0x000910cc	FL	1	*	*	*
PET vqc_y_axis_trans	0x000910cd	FL	1	*	*	*
PET vqc_y_axis_swivel	0x000910ce	FL	1	*	*	*
PET vqc_z_axis_trans	0x000910cf	FL	1	*	*	*
PET vqc_z_axis_roll	0x000910d0	FL	1	*	*	*
PET ctac_conv_scale	0x000910d1	LO	1	*	*	*
PET image_set_id	0x000910d2	UI	1	*	*	*
PET constrast_route	0x000910d3	SL	1	*	*	*
PET image_one_loc	0x000910d6	FL	1	*	*	*
PET image_index_loc	0x000910d7	FL	1	*	*	*
PET num_of_rr_interval	0x000910dd	US	1	*	*	*

PET num_of_time_slots	0x000910de	US	1	*	*	*
PET num_of_slices	0x000910df	US	1	*	*	*
PET num_of_time_slices	0x000910e0	US	1	*	*	*
PET rest_stress	0x000910e2	SL	1	*	*	*
PET frame_id	0x0009105c	UI	1	*	*	*
PET scan_id	0x0009105d	UI	1	*	*	*
PET exam_id	0x0009105e	UI	1	*	*	*
PET patient_id	0x0009105f	LO	1	*	*	*
PET compatible_version	0x00091060	SH	1	*	*	*
PET software_version	0x00091061	SH	1	*	*	*
PET where_is_frame	0x00091062	ST	1	*	*	*
PET frame_size	0x00091063	SL	1	*	*	*
PET file_exists	0x00091064	SL	1	*	*	*
PET patient_entry	0x00091065	SL	1	*	*	*
PET table_height	0x00091066	FL	1	*	*	*
PET table_z_position	0x00091067	FL	1	*	*	*
PET landmark_datetime	0x00091068	DT	1	*	*	*
PET slice_count	0x00091069	SL	1	*	*	*
PET start_location	0x0009106a	FL	1	*	*	*
PET acq_delay	0x0009106b	SL	1	*	*	*
PET acq_start	0x0009106c	DT	1	*	*	*
PET acq_duration	0x0009106d	SL	1	*	*	*
PET acq_bin_dur	0x0009106e	SL	1	*	*	*
PET acq_bin_start	0x0009106f	SL	1	*	*	*
PET actual_stop_cond	0x00091070	SL	1	*	*	*
PET total_prompts	0x00091071	FD	1	*	*	*
PET total_delays	0x00091072	FD	1	*	*	*
PET frame_valid	0x00091073	SL	1	*	*	*
PET validity_info	0x00091074	SL	1	*	*	*
PET archived	0x00091075	SL	1	*	*	*
PET compression	0x00091076	SL	1	*	*	*
PET uncompressed_size	0x00091077	SL	1	*	*	*
PET accum_bin_dur	0x00091078	SL	1	*	*	*
PET frame_number	0x000910d8	SL	1	*	*	*
PET list_file_exists	0x000910d9	SL	1	*	*	*
PET where_is_list_frame	0x000910da	ST	1	*	*	*
PET unlisted_scan	0x000910e1	SL	1	*	*	*
PET phase_percentage	0x000910e3	FL	1	*	*	*
PET acq_bin_num	0x000910e8	SL	1	*	*	*
PET acq_bin_dur_percent	0x000910e9	FL	1	*	*	*
PET compatible_version	0x00091079	SH	1	*	*	*

PET software_version	0x0009107a	SH	1	*	*	*
PET is_datetime	0x0009107b	DT	1	*	*	*
PET is_source	0x0009107c	SL	1	*	*	*
PET is_contents	0x0009107d	SL	1	*	*	*
PET is_type	0x0009107e	SL	1	*	*	*
PET is_reference	0x0009107f	DS	1	*	*	*
PET multi_patient	0x00091080	SL	1	*	*	*
PET number_of_normals	0x00091081	SL	1	*	*	*
PET color_map_id	0x00091082	UI	1	*	*	*
PET window_level_type	0x00091083	SL	1	*	*	*
PET rotate	0x00091084	FL	1	*	*	*
PET flip	0x00091085	SL	1	*	*	*
PET zoom	0x00091086	FL	1	*	*	*
PET pan_x	0x00091087	SL	1	*	*	*
PET pan_y	0x00091088	SL	1	*	*	*
PET window_level_min	0x00091089	FL	1	*	*	*
PET window_level_max	0x0009108a	FL	1	*	*	*
PET recon_method	0x0009108b	SL	1	*	*	*
PET attenuation	0x0009108c	SL	1	*	*	*
PET atten_coefficient	0x0009108d	FL	1	*	*	*
PET bp_filter	0x0009108e	SL	1	*	*	*
PET bp_filter_cutoff	0x0009108f	FL	1	*	*	*
PET bp_filter_order	0x00091090	SL	1	*	*	*
PET bp_center_l	0x00091091	FL	1	*	*	*
PET bp_center_p	0x00091092	FL	1	*	*	*
PET atten_smooth	0x00091093	SL	1	*	*	*
PET atten_smooth_param	0x00091094	SL	1	*	*	*
PET angle_smooth_param	0x00091095	SL	1	*	*	*
PET wellcountercal_id	0x00091096	UI	1	*	*	*
PET trans_scan_id	0x00091097	UI	1	*	*	*
PET norm_cal_id	0x00091098	UI	1	*	*	*
PET blnk_cal_id	0x00091099	UI	1	*	*	*
PET cac_edge_threshold	0x0009109a	FL	1	*	*	*
PET cac_skull_offset	0x0009109b	FL	1	*	*	*
PET emiss_sub_id	0x0009109c	UI	1	*	*	*
PET radial_filter_3d	0x0009109d	SL	1	*	*	*
PET radial_cutoff_3d	0x0009109e	FL	1	*	*	*
PET axial_filter_3d	0x0009109f	SL	1	*	*	*
PET axial_cutoff_3d	0x000910a0	FL	1	*	*	*
PET axial_start	0x000910a1	FL	1	*	*	*
PET axial_spacing	0x000910a2	FL	1	*	*	*

PET axial_angles_used	0x000910a3	SL	1	*	*	*
PET ir_num_iterations	0x000910b2	SL	1	*	*	*
PET ir_num_subsets	0x000910b3	SL	1	*	*	*
PET ir_recon_fov	0x000910b4	FL	1	*	*	*
PET ir_corr_model	0x000910b5	SL	1	*	*	*
PET ir_loop_filter	0x000910b6	SL	1	*	*	*
PET ir_pre_filt_parm	0x000910b7	FL	1	*	*	*
PET ir_loop_filt_parm	0x000910b8	SL	1	*	*	*
PET response_filt_parm	0x000910b9	FL	1	*	*	*
PET post_filter	0x000910ba	SL	1	*	*	*
PET post_filt_parm	0x000910bb	FL	1	*	*	*
PET ir_regularize	0x000910bc	SL	1	*	*	*
PET regularize_parm	0x000910bd	FL	1	*	*	*
PET ac_bp_filter	0x000910be	SL	1	*	*	*
PET ac_bp_filt_cut_off	0x000910bf	FL	1	*	*	*
PET ac_bp_filt_order	0x000910c0	SL	1	*	*	*
PET ac_img_smooth	0x000910c1	SL	1	*	*	*
PET ac_img_smooth_parm	0x000910c2	FL	1	*	*	*
PET scatter_method	0x000910c3	SL	1	*	*	*
PET scatter_num_iter	0x000910c4	SL	1	*	*	*
PET scatter_parm	0x000910c5	FL	1	*	*	*
PET ctac_conv_scale	0x000910d4	LO	1	*	*	*
PET loop_filter_parm	0x000910d5	FL	1	*	*	*
Recon Protocol	0x000910e4	ST	1	*		*
PET compatible_version	0x000910a4	SH	1	*	*	*
PET software_version	0x000910a5	SH	1	*	*	*
PET slice_number	0x000910a6	SL	1	*	*	*
PET total_counts	0x000910a7	FL	1	*	*	*
PET other_atts	0x000910a8	OB	1	*	*	*
PET other_atts_size	0x000910a9	SL	1	*	*	*
PET archived	0x000910aa	SL	1	*	*	*
PET bp_center_x	0x000910ab	FL	1	*	*	*
PET bp_center_y	0x000910ac	FL	1	*	*	*
PET trans_frame_id	0x000910ad	UI	1	*	*	*
PET tpulse_frame_id	0x000910ae	UI	1	*	*	*
PET profile_spacing	0x000910b1	FL	1	*	*	*
PET seg_qc_parm	0x000910c6	FL	1	*	*	*
PET overlap	0x000910c7	SL	1	*	*	*
PET ovlp_frm_id	0x000910c8	UI	1	*	*	*
PET ovlp_trans_frm_id	0x000910c9	UI	1	*	*	*
PET ovlp_tpulse_frm_id	0x000910ca	UI	1	*	*	*

PET ir_z_filter_flag	0x000910db	SL	1	*	*	*
PET ir_z_filter_ratio	0x000910dc	FL	1	*	*	*
PET left shift	0x000910e5	FL	1	*	*	*
PET posterior shift	0x000910e6	FL	1	*	*	*
PET superior shift	0x000910e7	FL	1	*	*	*
3D Filter flag	0x000910ea	SL	1	*		*
3D Filter cutoff	0x000910eb	FL	1	*		*
3D Filter order	0x000910ec	SL	1	*		*
Reformat group	0x000910f0	UI	1	*		*